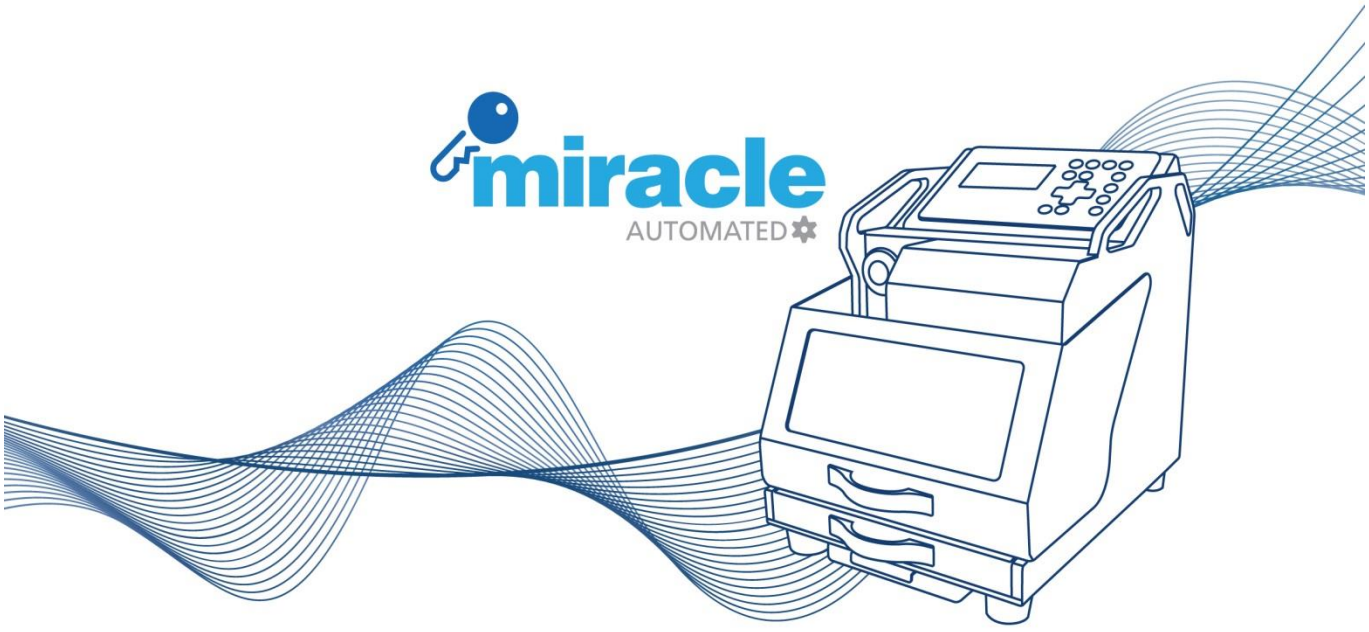
MIRACLE-A6

Instruction Manual

- Please read the manual before operating this equipment without fail
- The appearance and performance of this product is subject to change without prior notice for usability improvement, and there may be parts not homologous with the manual

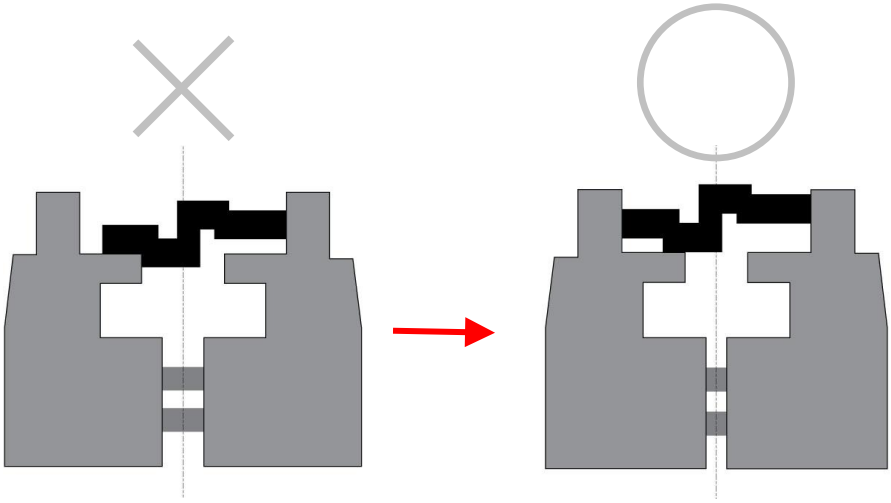


redt
RED TECHNOLOGY
http://www.miraclekey.com

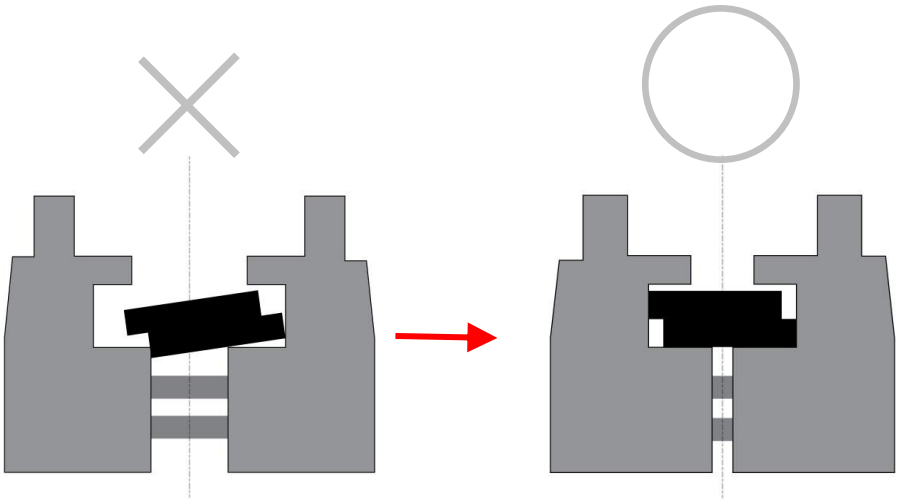
CAUTION

☞ Be careful not to mount a key incorrectly (asshown in the following figures) when cutting or decoding.

Standard(Edge) Key:



Laser Key:



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Make sure to follow the below directions when you use the machine.

✓ Miracle-A6 is designed to be operated DC24V. This machine is only to be operated made when DC24V is available. When any power supply other than DC24V is used, the machine may not function properly In particular, when low voltage (less than 24V) is used, the DC motor output decreases, leading to slower rotation.

✓ Replace the Cutter on a regular maintenance basis. Delaying the replacement of the Cutter may inhibit the cutting force, leading to failure of accurate key cutting.

✓ Depending on the alloy makeup of the key blank, the necessary cutting force of the Cutter should be adjusted. Set the cutting speed and cutting unit by the strength of the key blank.

✓ Take precautions not to drop the machine or allow it to get wet (from rain or snow) when using it outside.

✓ Make sure to check for errors on the key blank before cutting the key. An error on key blank itself may produce unexpected results, even if the machine cuts the key accurately.

✓ This machine is not equipped with a function to sense the Clamp contact to the tools. Therefore, when key cutting, the Clamp may be damaged by the tools, depending on the type of the key or the type of the Clamp selected. Take precautions when operating the key and the Clamp. The manufacturers or resellers are not responsible for Clamp damage during the key cutting process.

◆ Cautions for Safety

Make sure to observe the followings for safe use of the product.

- **The below information is provided for user safety and to prevent personal injury or property damage.**
- **Read the below cautions carefully.**

	Indicates that you may get injured or experience equipment damage if you fail to follow the instructions.
	Indicates that you could be seriously injured if you fail to follow the instructions.

■ Cautions for Power

	Never use damaged or defective power cords or loose plugs or sockets. ➢ **They may cause electric shock or fire.**		**Never plug too many power cords into an outlet simultaneously. The outlet may get too hot and cause fire.**
	Never pull the plug out by tugging on the power-cord, or touching the power plug.		**Keep the machine unplugged not using it for a long time.**
	If smoke rises up while using the machine, turn off the power right away. Contact user`s dealer or our factory for advice.		**Cigarette jack fuse may blow out when you connect the machine to the vehicle cigarette jack. In such a case, replace the old fuse with a new fuse 10A or greater. You can only use the machine connected to the cigar jack while the vehicle engine is running.**

■ Cautions for Installation

	Do not install the machine in a place with oil, smog, moisture, dust or water splashing. ➢ **It may cause electric shock or fire.**		**Do not put burning cigarettes or candles on the machine. Keep it away from heating apparatus such as stoves.** **The unit could get overheated, resulting in failure or fire.**
	Make sure to install the main body on a stable flat surface. **The machine weighs about 21.5Kg and generates vibration on both sides during operation. If you use the machine on a weak, wobbly, or bumpy surface, it may lead to damage on machine/worktable or injury**		

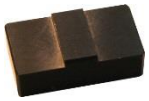
■ Cautions for Use

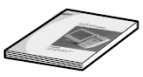
WARNING	➢ The blade of the machine spins at high speed during its operation. Be careful not to allow any part of user's body or clothing to get inside the machine. ➢ The operator may get seriously injured by the Cutter if this is ignored or overlooked. 	WARNING	Do not put any tools, water containers, mugs, cups or small metal pieces on the unit or cutting bed. ➢ The vibration of the machine and carelessness of the user may cause falling of the above objects, which could lead to bodily injury. Overheating or electric leakage could also lead to fire or malfunction. ➢ It may also cause electric shock or fire when the unit gets wet.
WARNING	Be careful not to catch any part of user`s body or clothing in the route of each axis of the machine, so as not to be damaged or injured by its blade. When a part of body or object is jammed in the axis path of the machine, or gets scratched by a sharp blade, serious injury, machine damage or mechanical failure may occur.		

■ Other Cautions

WARNING	Do not disassemble or remodel the body of the machine. ➢ It may cause fire, electric shock or equipment failure. If you need a check-up, adjustment, or machine repair, please ask user`s dealer for service or contactor factory.	WARNING	Curiosity or carelessness of young children about the machine may lead them to serious injury. Keep the machine out of reach of small children.
CAUTION	In winter, sub-zero temperatures, may cause the unit to be unable to work properly. If such thing happens, increase the temperature of the work environment. Do not let the machine room temperature go below 0 degrees (C)		

Parts

Contents	Figure	Quantity	Purpose
AC adapter (CP-04)		1 EA	Power supply 24VDC 5A
Power cable (CP-02)		1 EA	
Cutter (T60-E20)		2 EA	Tool for key cutting
Decoder (T60-P10)		2 EA	Tool for decoding
T Wrench (CP-T25)		1 EA	Tool change
M5 bolt (CP-95)		2 EA	Used to fasten Cutter or Decoder
Stopper (CP-91)		1 EA	Guide for Key positions
Stopper Right-to-Left (CP-96)		1 EA	Guide for alignment-key location to hold a key from right-to-left

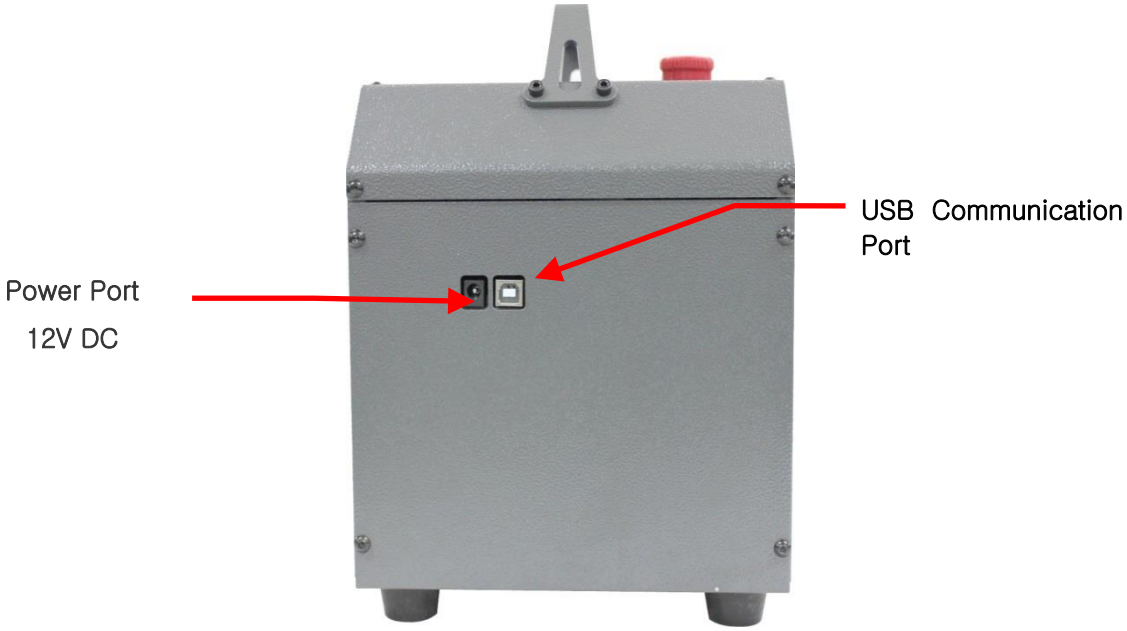
Auxiliary key hold bracket set (SX9 Clamp) (CP-92)		1 SET 5 EA	Auxiliary bracket to hold double-sided standard keys more firmly
Spindle belt (CP-SB35)		6 EA	Spindle belt transmitting spindle motor power to spindle (G35 3mm thick, 35mm in diameter)
Tools rack (CP-98)		1 EA	Tools storage
Mounting bracket (BP-95)		2 EA	Bracket to Hold the product on floor
Back bracket (BP-94BMA9)		1 EA	Bracket to protect the power connector and USB port
Calibration bar		1 EA	Guide for the calibration of the automobile key Clamp and dimple key Clamp
Program CD		1 EA	“CodeMASTER” program CD (SW for car key cutting and update)
User manual		1 EA	Product instruction guide
USB Communication Cable		1 EA	Connecting the product to PC for communication

☞ **TIP)**

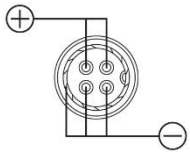
- **Cutters and spindle belts are consumables. Make sure to replace them with the new one on a regular maintenance schedule.**

Parts Names

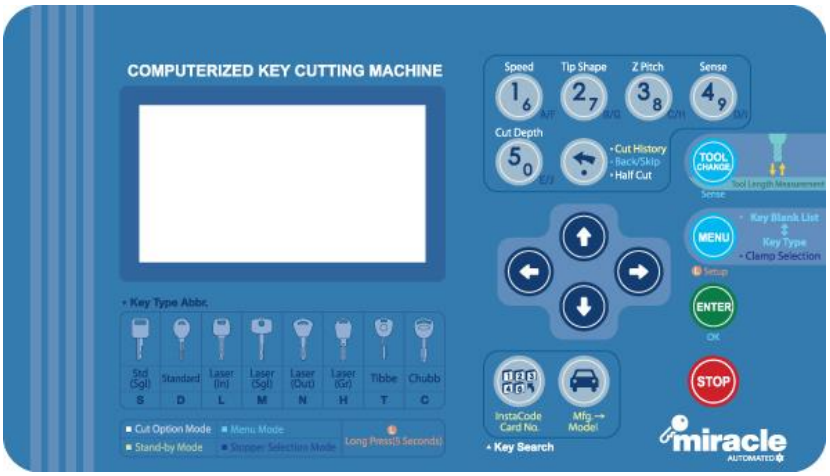
LCD
Front Shield Cover
Key
Power Switch
(Emergency Switch)
LED Light
Decoder
Clamp
Spindle
Clamp Knob
Clamp Holding Lever
Tool box
Chip Tray

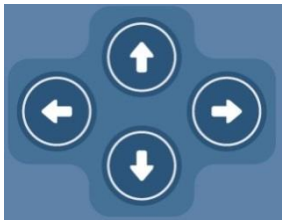

USB Communication
Port
Power Port
12V DC

Specifications

Power Input		24VDC / 5A 
Power Consumption		120W
Dimensions		255 (W)×360 (H)×340 (D)mm
Weight		24kg
Resolution		XY Axis: 0.005mm, Z Axis: 0.00125mm
Spindle Revolution		8,750 rpm
Bluetooth	Spec.	Bluetooth Specification V1.2
	Frequency	2.4GHz ISM Band
	Profile	SPP, GAP
Temperature		0 - 40 ºC
Humidity		10 - 90 %
Usage		Cutting and duplicating keys

Key Pad



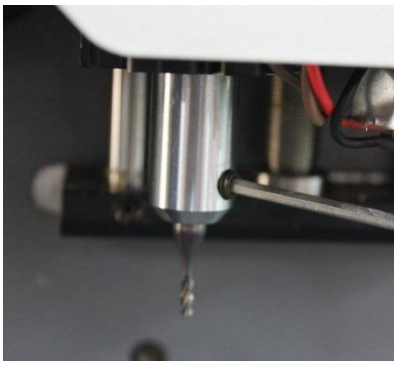
	Menu: Selects menu item **Input Number:** Inputs bitting number ● Inputting number 1~5: Press the button. ● Inputting number 6~0: Press the button again when 1~5 is displayed.
	Menu: Moves back **Input Bitting:** Inputs decimal
	**Menu:** : Moves to previous/next menu page : Moves menu item selection **Input Number:** : Moves to next input position : Increase/Decrease number
[Load key by Instacode]	Load key data by IC Card Code number in Instacode.
[Retrieve key by Maker]	Load key data from maker list.
[ENTER]	Enters selection or starts action.
[MENU]	Goes into menu
[TOOL CHANGE]	Measures cutter or decoder length
[STOP]	**While cutting:** Cancel cutting **Menu:** Jump to start

Cutter

The Cutter is a tool to be used for cutting a Key. The range of Cutter thickness can be set between 1.5mm -2.5mm. 2.0mm is the default thickness of the Cutter.

Type	Flat Cutter (T60-E20)
Total length	40mm
Shank Diameter	6mm
Blade Diameter	2.0mm (recommended)

[How to Replace]

1.		Loosen the bolt with a T-wrench to replace the **Cutter**.
2.		Press the **[Tool Change]** button in the keypad.
3.		If you press the **[Enter]**, the length of Cutter is Automatically measured.

☞ **TIP)**

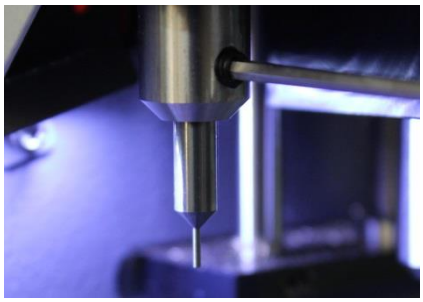
- **If the key is not cut accurately or there is a loud noise in cutting, check the Cutter condition and replace it if necessary.**

Decoder

The Decoder is a tool used for decoding and copying keys.

Type	**Decoder (T60-P10)**
Total length	**40mm**
Shank Diameter	**6mm**
Blade Diameter	**1.0mm**

[How to Replace]

1.		Loosen the bolt with a T-wrench to replace the **Decoder**.
2.		Press the **[Tool Change]** button in the keypad.
3.		If you press the **[Enter]**, the length of Decoder is Automatically measured.

● The Decoder is easily broken.

● If the Decoder is bent, a measurement error is generated. The machine is designed so that when the force is strong enough to bend the Decoder, the Decoder will break off.

● Take extra care not to drop Decoder, to impact to the Decoder nor make mistakes when using it.

● The manufacturer of resellers are not responsible for the breaking of Decoder, in any cases.

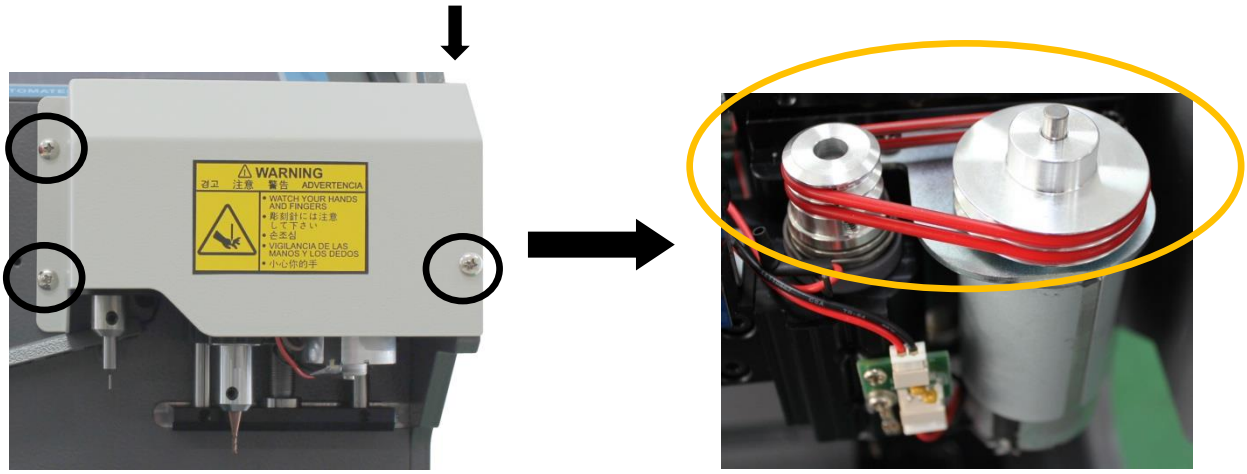
Spindle Belt

Miracle-A6 delivers rotational force to the Spindle through the Spindle Belt.
The Spindle Belt is perishable. If the key does not cut accurately or there is a loud noise in cutting, check the spindle belt condition and replace it if necessary.

Type	**Silicon Belt (CP-SB35)**
Thickness	**3mm**
Diameter(Inside)	**35mm**

[How to Replace]

- Loosen the bolts on the head cover to remove the Cover and remove the existing Belt and replace it with the new Belt.



CAUTION

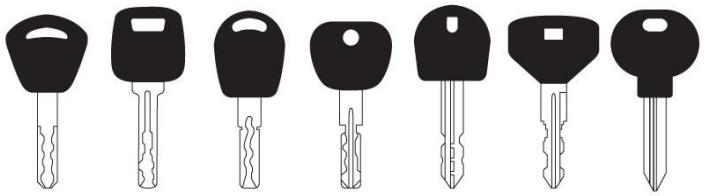
- **When the Spindle Belt wears out, the Cutter life is reduced and key cutting may not function properly.**
- **Check the Spindle Belt condition periodically and replace if necessary.**

Type of Clamps

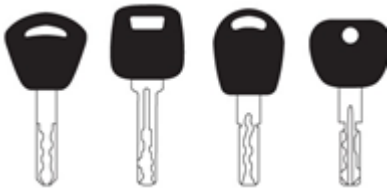
Miracle-A6 can be used by exchanging three types of clamps according to the type of keys to be processed.

[Clamp Type]

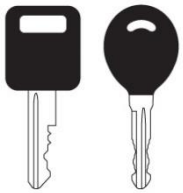
1) Automobile key (CP-86) No.1 Clamp



2) Dimple key (CP-88) No.2 Clamp

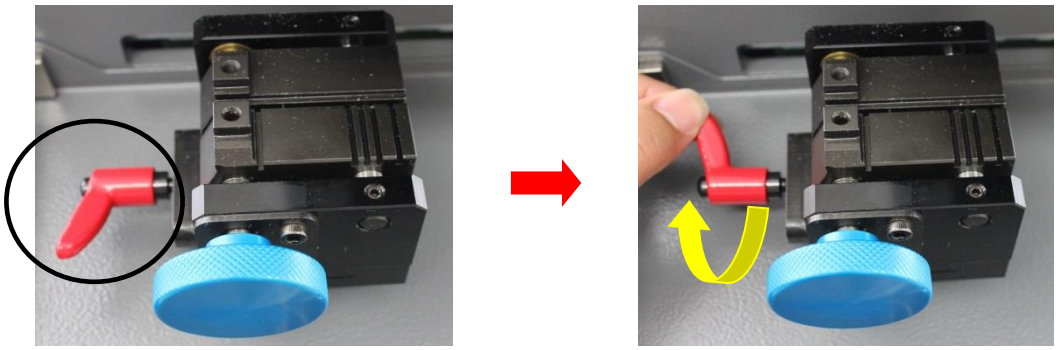


3) Single Sided key (CP-89) No.3 Clamp

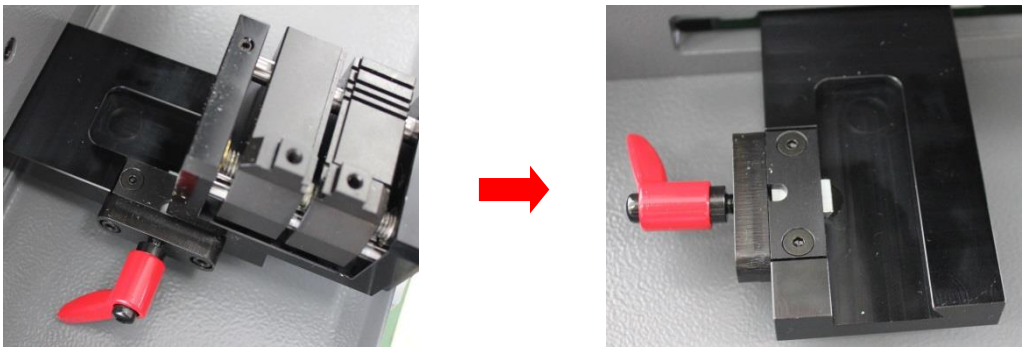


[How to Replace the Clamp]

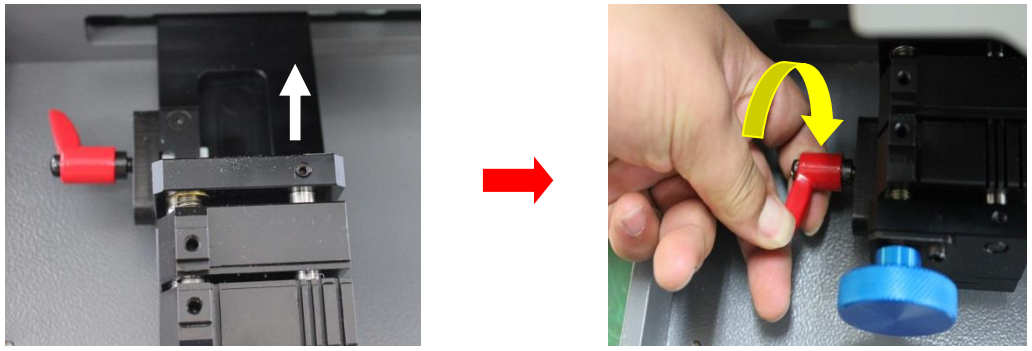
1. Unfasten the Clamp holding Lever.



2. Remove the Clamp.



3. Push the desired Clamp into the groove. **Turn it in as far as possible** and fasten the holding Lever.

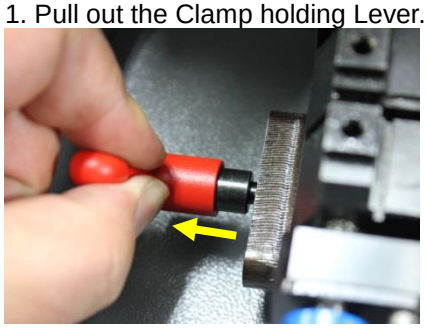


☞ TIP)

● If the Clamp holding Lever is located in a position that prevents you from fastening the Clamp, you can adjust the Lever position.

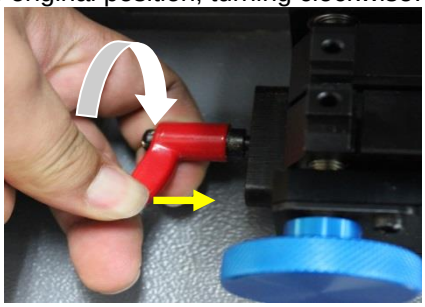
[How to Adjust Clamp Holding Lever Position]

1. Pull out the Clamp holding Lever.



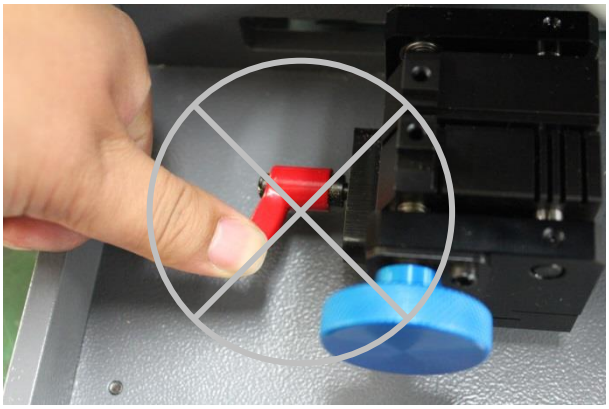
2. To pull it out, turn it counterclockwise.

3. Push it into the original position, turning clockwise.

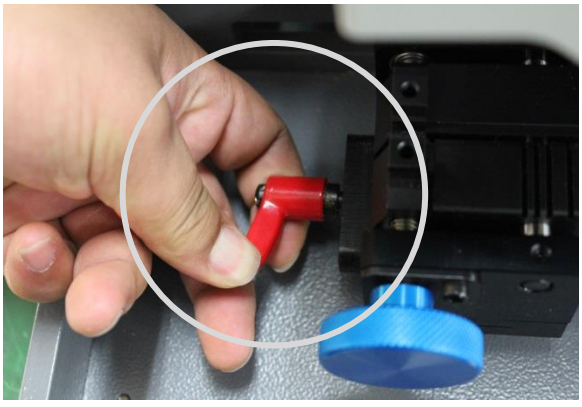


CAUTION

● If you fasten the Clamp by pressing down the Lever repeatedly, the Clamp may wobble. The Clamp must be tightened by turning the Lever.



DON'T Press Down

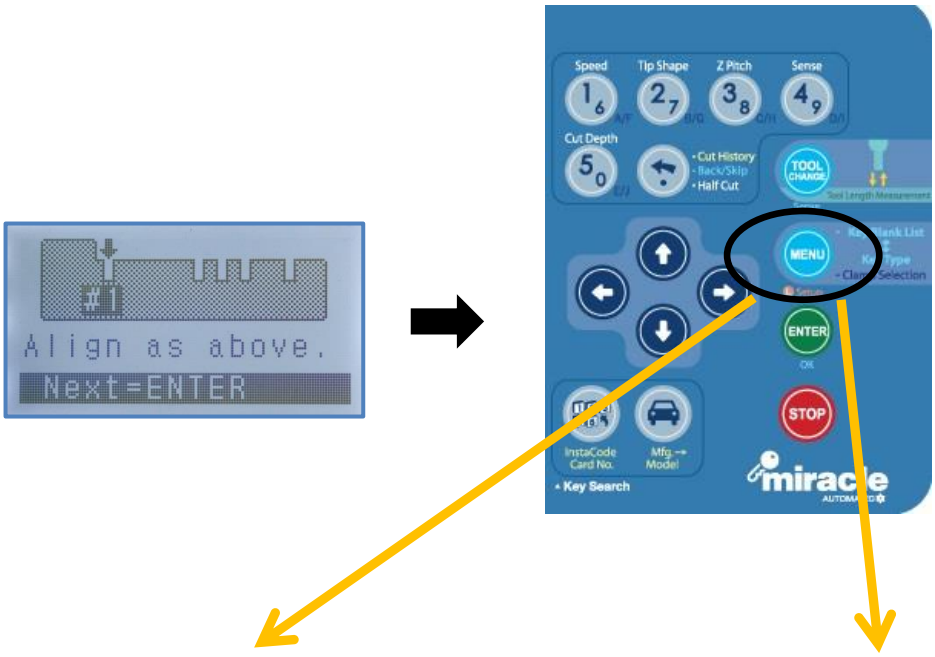


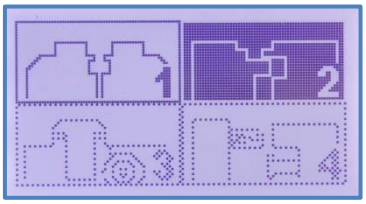
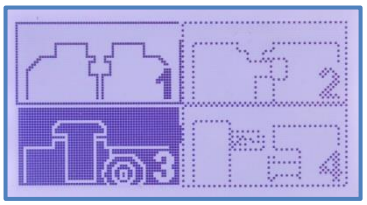
DO Turn Clamp

[How to Use the Another Clamps]

- When cutting and copying keys, press

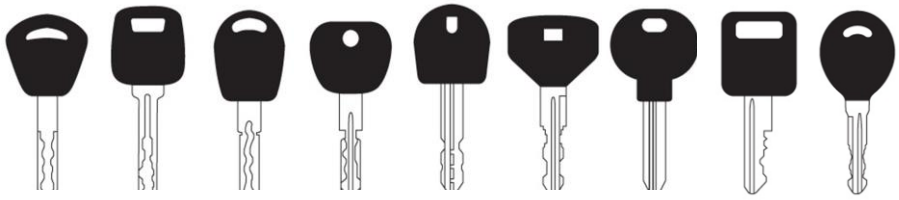
[MENU] button from the key fixing screen to choose a clamp.



Laser Key	Standard Key
 Dimple key **(CP-88)**	 Single Sided key **(CP-89)**

How to Fasten keys by clamp Types

1) Automobile Key Clamp (No.1 Clamp)



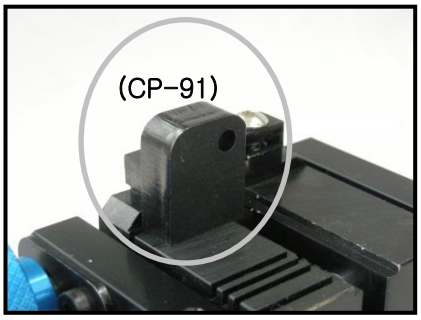
(CP-86)

[How to Fasten Key]

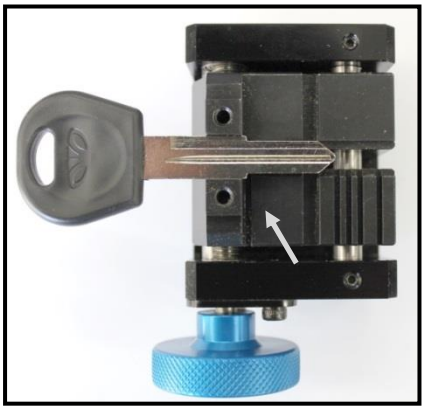
- Position of the Stopper **(CP-91)** is changed based on the reference point of the key. The following are the positions for the standard Stopper **(CP-91)** in the shoulder align key and the tip align key.

◆ Shoulder Align Key

Example for Standard Key



1. Insert the Stopper in the shoulder align groove.

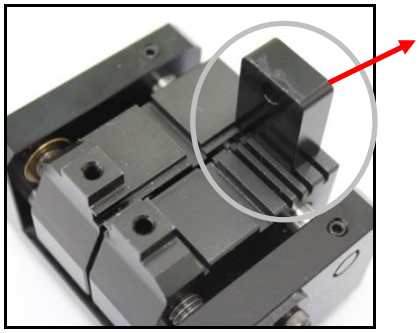


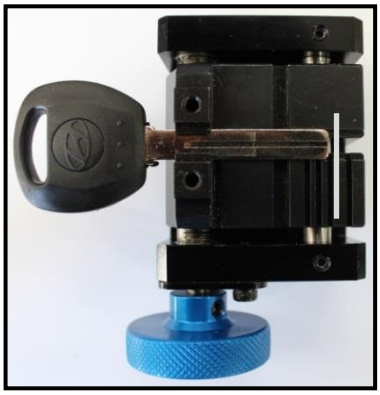
2. Place the key on the upper area of the Clamp. When the reference point touches the Stopper, fasten the Clamp tightening handle to hold the key.

Cross-Section of Shoulder Align Key Fastened

◆ Tip Align Key

Example of Laser Key





1. Insert the Stopper to the tip align groove.
   (Follow the instruction displayed in the LCD of the machine for the groove to use or decide the groove based on the key length.)

2. Place the key on the lower area of the Clamp. Make sure the key tip touches the Stopper and fasten the Clamp tightening handle

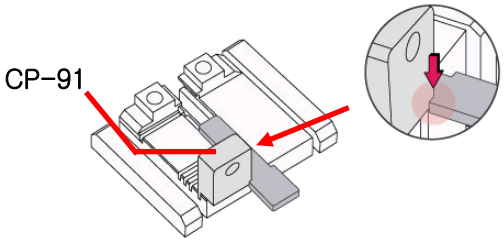
Cross-Section of Laser Key Fastened

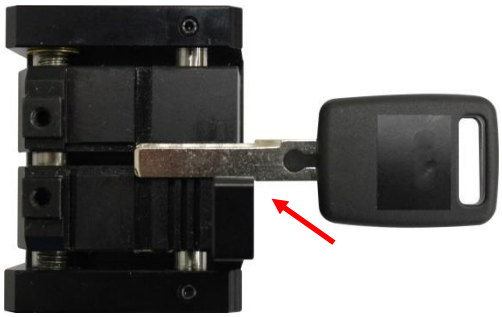
☞ **TIP)**

● **In case the Laser Key is unavailable to be fastened in a normal way, you can flip the key over and fasten it on the opposite side.**

◆ Shoulder Align Laser Key

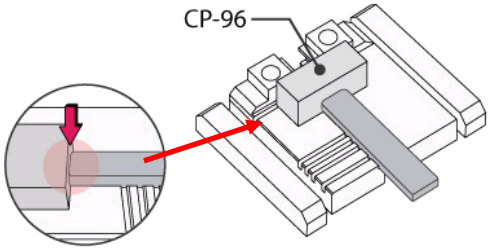
* Display in LCD



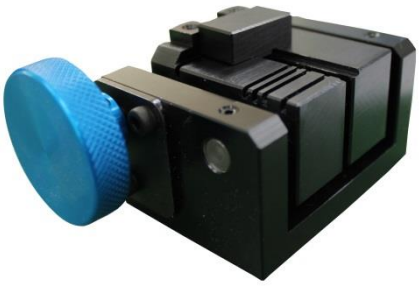


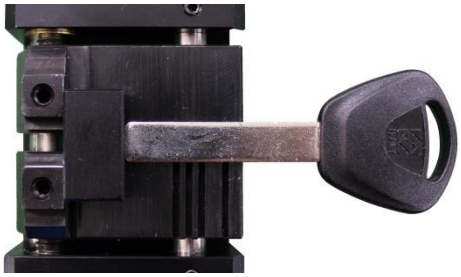
◆ Tip Align Laser Key

* Display in LCD



If you hold the opposite side of the key, an additional Clamp **(CP-96)** is required.

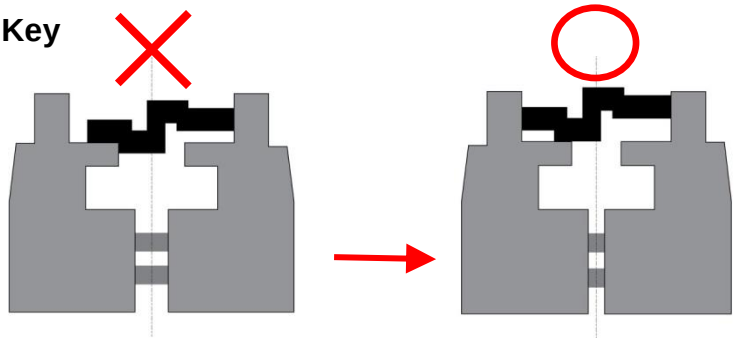




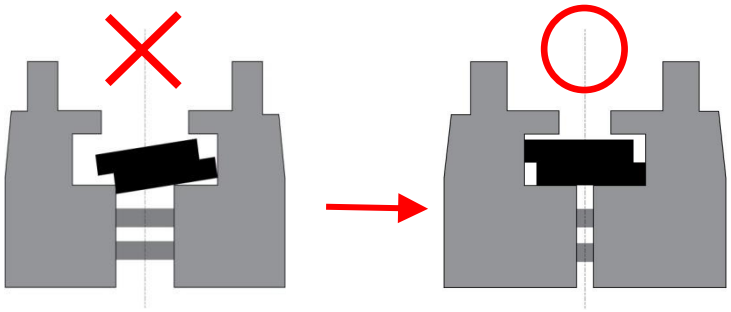
CAUTION

● **Take extra caution not to fasten the key incorrectly as in the below examples.**

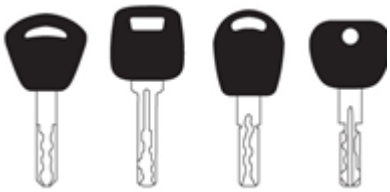
Standard Key



Laser Key



2) Dimple Key Clamp (No.2 Clamp)

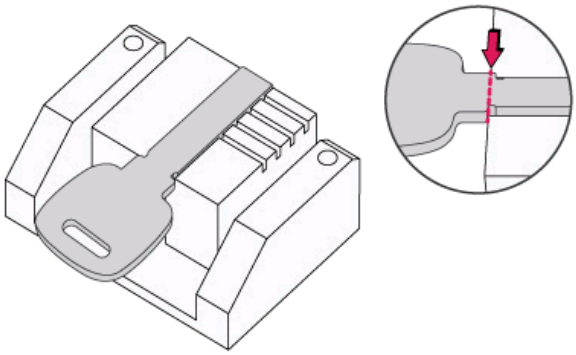


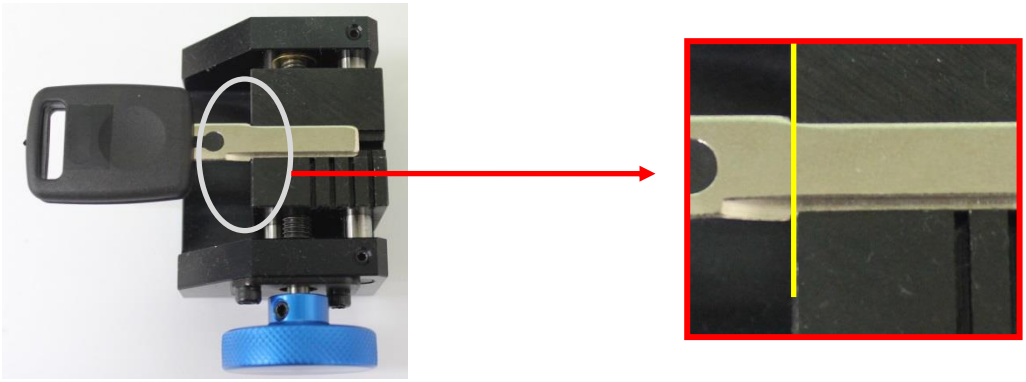
(CP-88)

[How to Fasten Key]

◆ Shoulder Align Key

* Program Screen

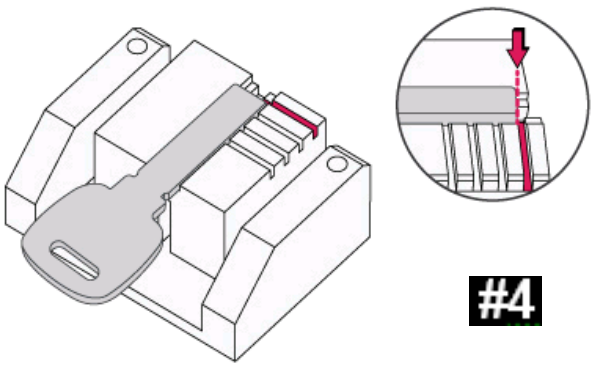


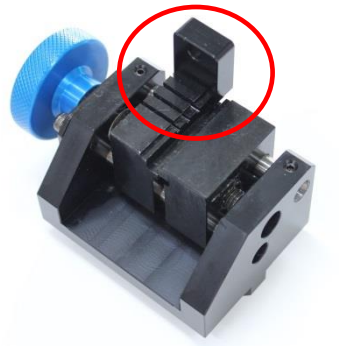
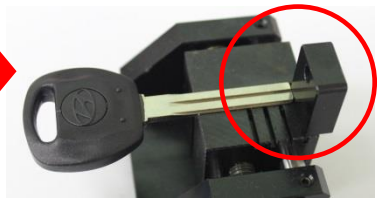
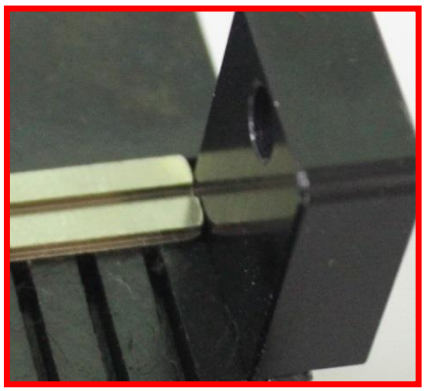


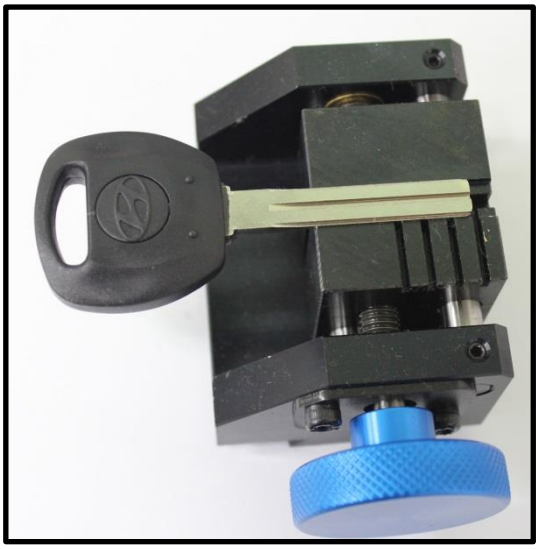
Install the key by aligning the shoulder as shown in the picture.

◆ Tip Align Key

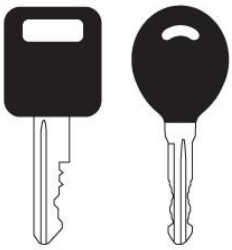
* Program Screen



<table>
<tr>
<td colspan="2">   </td>
<td rowspan="2">  </td>
</tr>
<tr>
<td>1. Set the Stopper as shown in the program screen.</td>
<td>2. Align the key to the Stopper and fasten the Clamp tightening handle to hold the key.</td>
</tr>
</table>



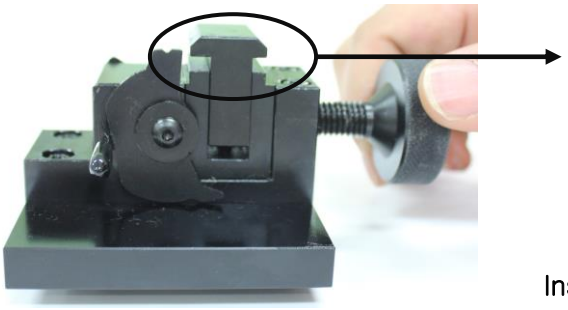
3) Single Sided Key Clamp (No.3 Clamp)

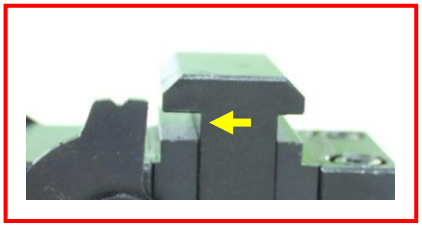


(CP-39)

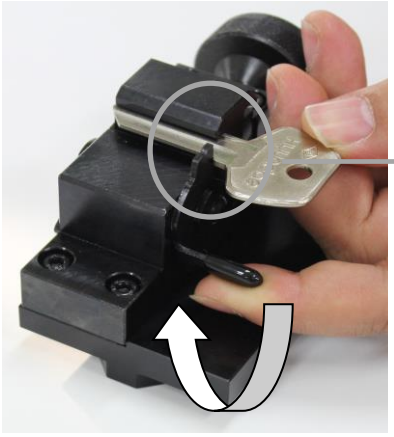
[How to Fasten Key]

In the two grooves on the Key Clamp guide with different depths (3.5mm and 5mm, respectively), select the groove that fits the desired key. Place the key and turn the Clamp tightening handle to hold the key.

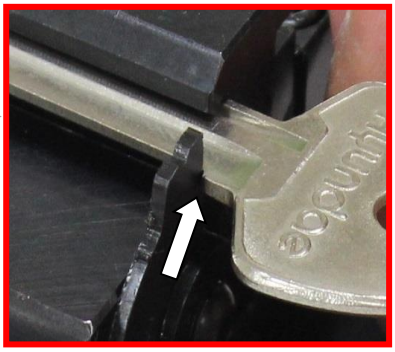


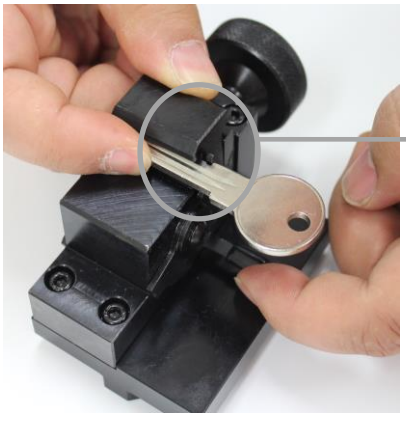


Insert the key horizontally on the above groove and affix it by turning the Clamp tightening handle.

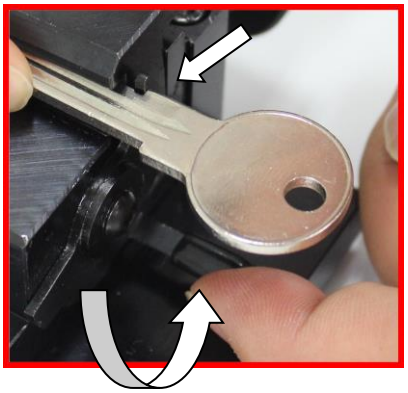


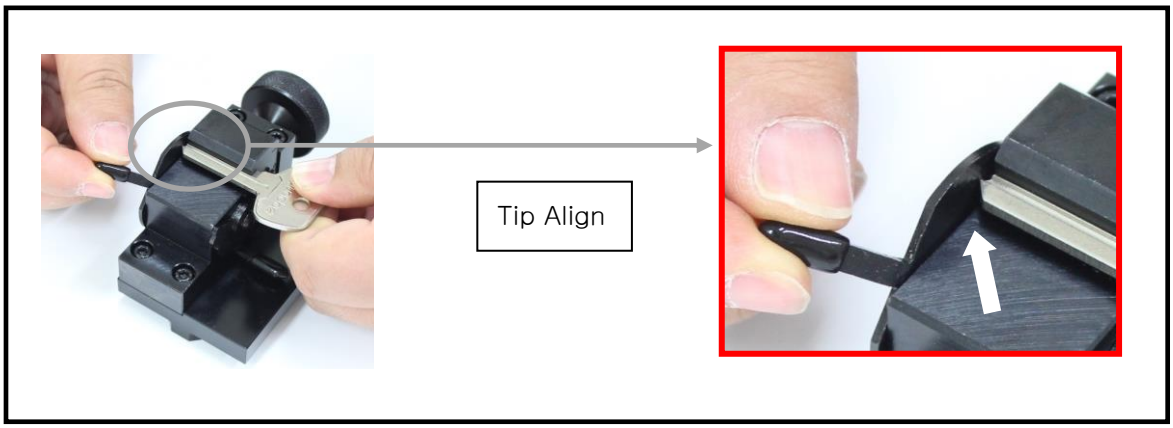
Shoulder Align 1





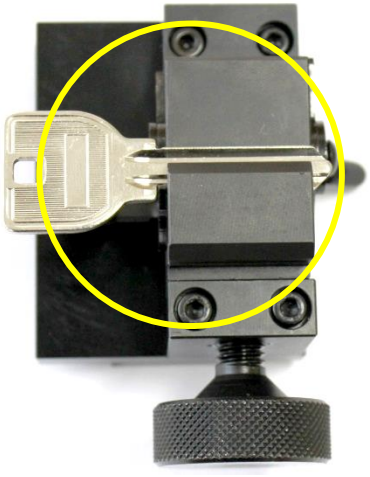
Shoulder Align 2





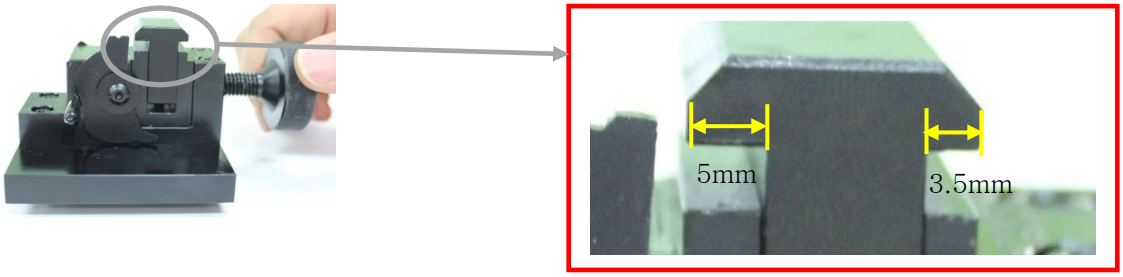
CAUTION

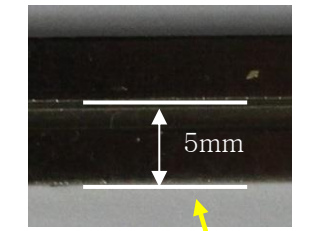
● **When installing the key, place it by horizontally, aligning it with the Clamp as shown in the below.**

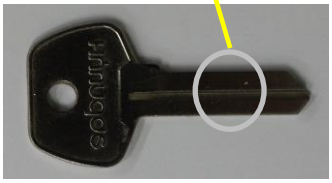


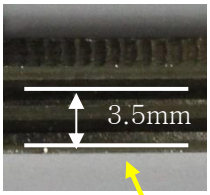
[Use of Guide by Type of Single Sided Domestic Key]

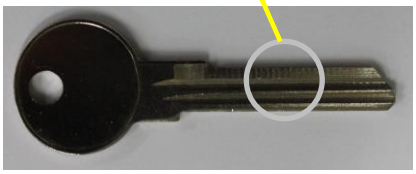
The Single Sided Domestic Key Clamp is designed to expand from **3.5mm and 5mm** on the side, respectively. You can set the direction of the guide based on the width of the desired key**.**









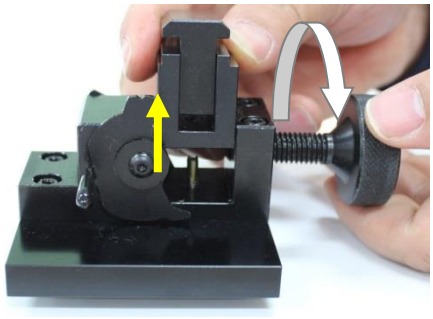


WARNING

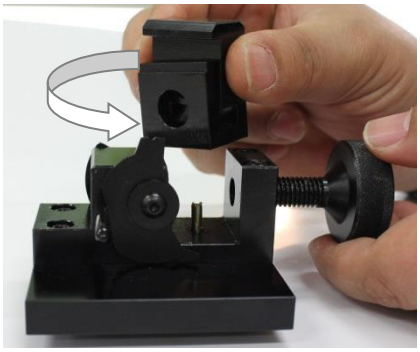
- **If the maximum cutting depth of the key is deeper than the width of Clamp, the Clamp will be damaged by the Cutter. Be sure to change the direction of Clamp to fit to the width of the key.**
- **Since Miracle-A6 has no function to detect the validity of Clamp, be sure to check the direction of the Clamp. Users are responsible for all damaged tools and Clamp.**

[How to Change Clamp Direction]

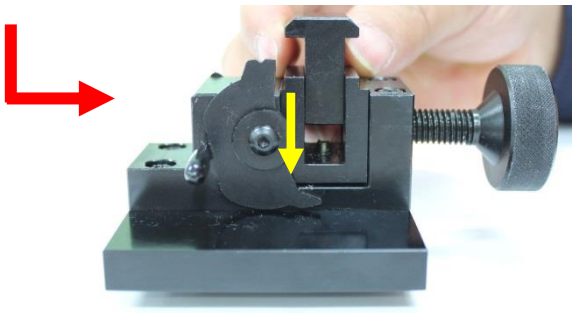
1. Loosen the Clamp knob as much as possible and separate the guide.



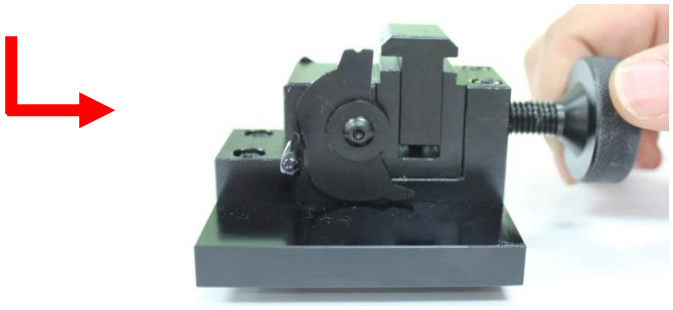
2. Change the guide direction



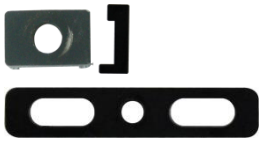
3. Insert the guide into the groove again



4. Fasten the Clamp tightening handle to hold the guide.

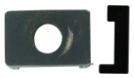


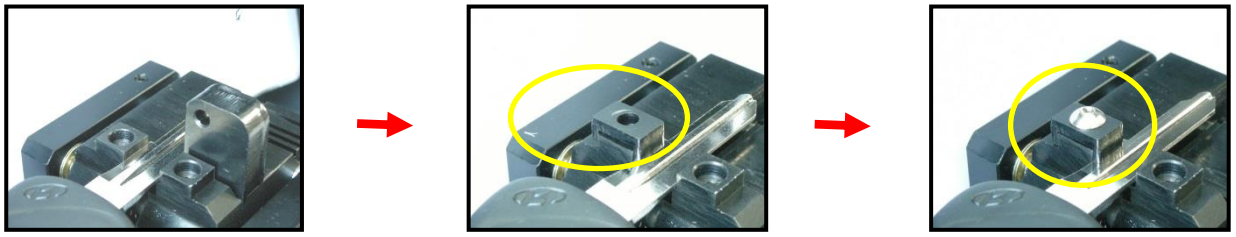
How to Use Auxiliary Key Hold Bracket Set



(CP-92)

When the key is too thin, it may be hard or impossible to fasten the key with the Clamp, so the key may bound up during cutting. In such a case, you can use an Auxiliary Key Hold Bracket set for proper operation.

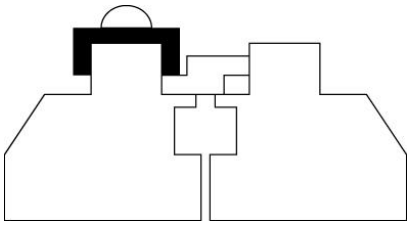




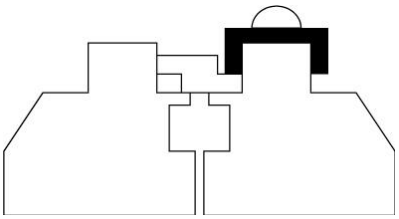
1. Fasten the key on the Clamp.

2. Insert the Auxiliary Key Clamp set into the deeper groove between the two sides of the key.

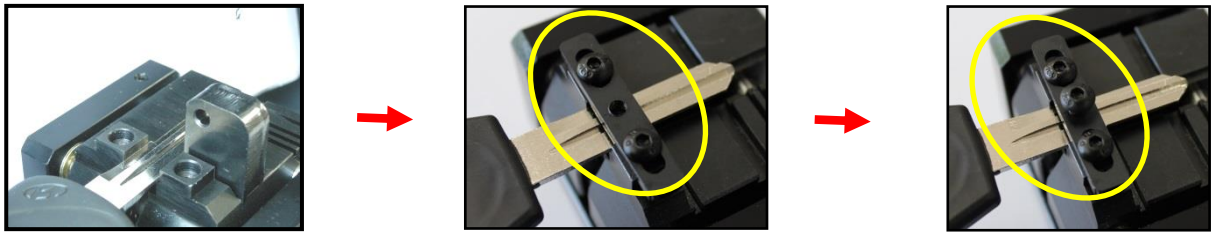
3. Fasten the bolt.



[When the inner groove is shallower]



[When the outer groove is shallower]

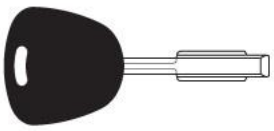


1. Fasten the key on the Clamp.

2. Place the Auxiliary Key Clamp set on the Clamp and loosely fasten the bolt.

3. Put the bolt into the middle hole of the Auxiliary Key Clamp set and fasten it to press the Key.

How to Use Tibbe Clamp



(CP-61)

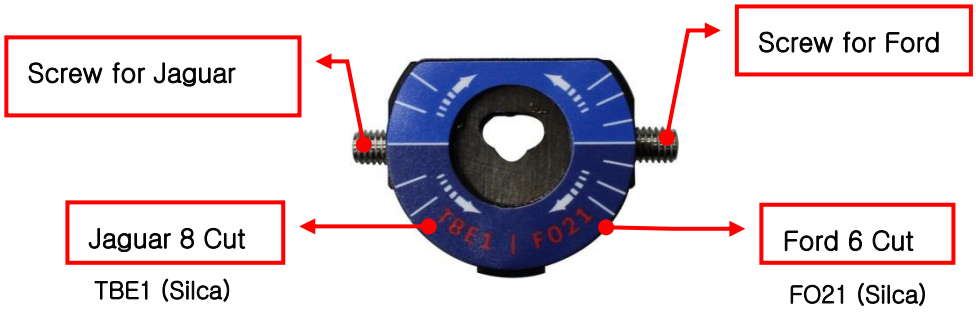
Miracle-A6 can cut Ford or Jaguar Keys using Tibbe Clamp.

◆ Direction

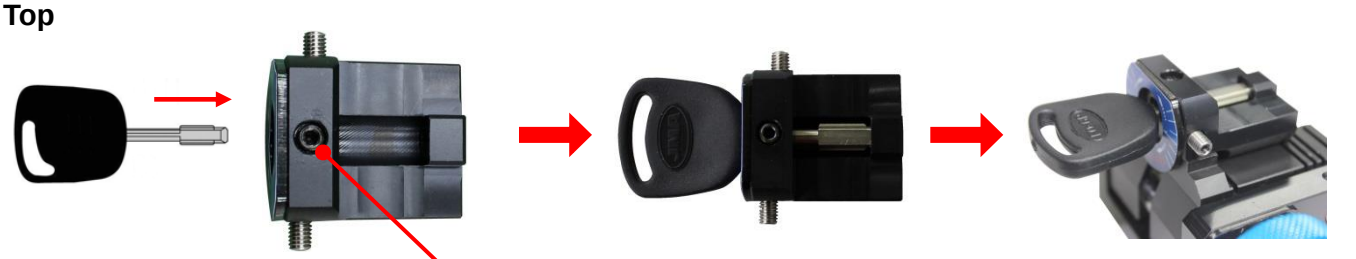
(e.g.: Ford 6 cut, Silca: FO21)

Unfasten the bolt (Jaguar 8 Cut) on the left of the Clamp (image below) and fasten the bolt (Ford 6 Cut) on the right by hand (Make sure to fasten by hands and do not fasten too hard).

Front



Top



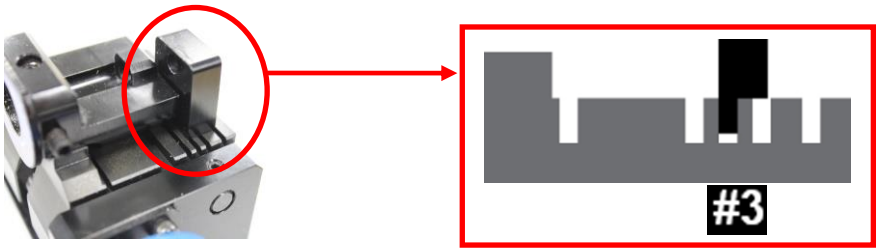
1. Insert the key in the direction indicated in the picture.

2. Fasten the bolt to fasten the key.

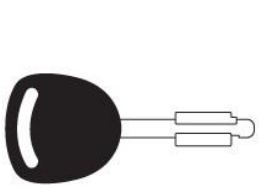
3. Fasten the Car Key Clamp on the third

CAUTION

● **When placing the Tibbe Clamp, make sure to place the Stopper in the third groove.**



How to Use LDV (FO19) Clamp



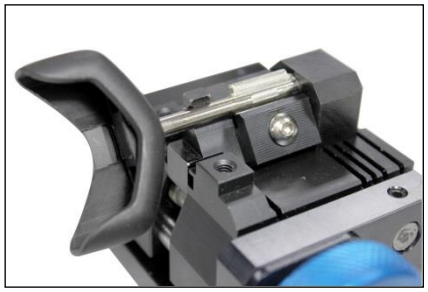
(CP-62)

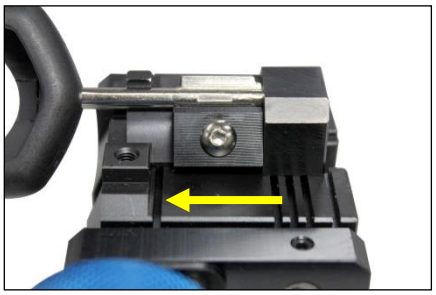
Miracle-A6 can cut LDV Key using LDV (FO19) Clamp.

◆ How to Use

1. Insert the key in the indicated direction.

2. Fasten the bolt to fasten the key.

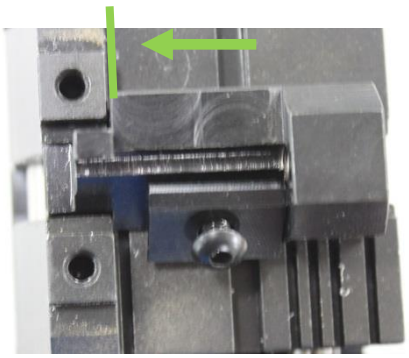




Place the LDV Clamp on the Automobile Key Clamp and push it to the left to the maximum and fasten it.

CAUTION

Place the LDV Clamp on the Automobile Key Clamp and push it to the left to the maximum and fasten it.



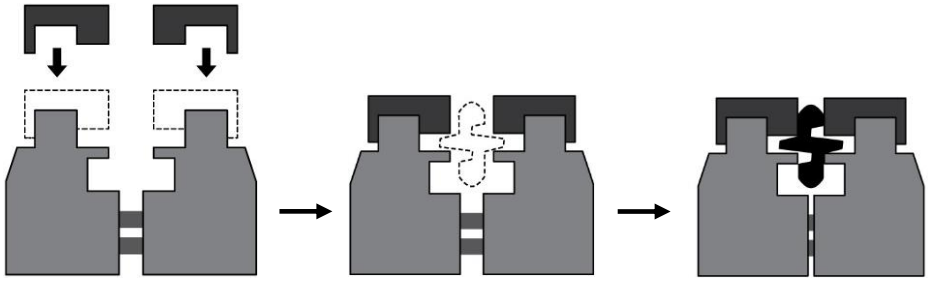
☞ TIP)

- **LDV (FO19) Clamp does not use the Stopper (CP-91).**

How to Use SX9 Key Clamp

Auxiliary Clamp enables easy SX9 key (Side A) and thin standard (edge) key holding.

SX9 Key Holding



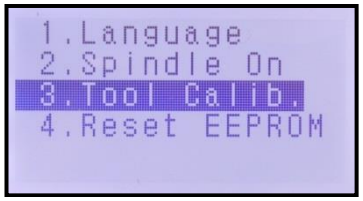
Clamp Origin setting

◈ Distance measurement between Decoder and Cutter

- Be sure to measure the distance between Decoder and Cutter before setting up the origin of the clamp.

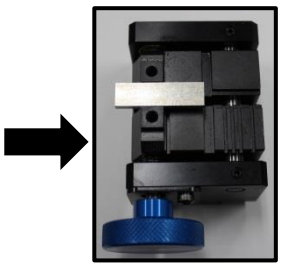
1. Press and hold

menu button for five seconds.



2. From the screen above, press key to choose [3.Tool Calib.] and press

[Enter].

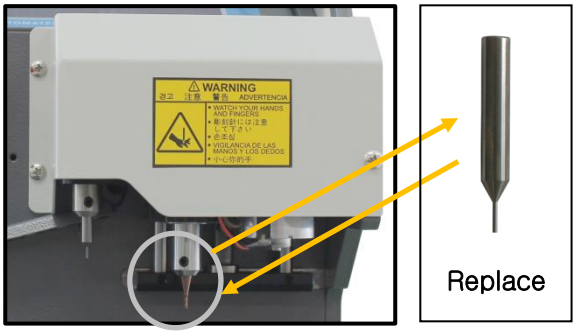


3. 1. After installing the Automobile Key Clamp, install the center measure bar on the top of the Clamp and Press the

[Enter] button.

4. After finishing the measurement of Decoder, replace the Cutter with Decoder according to the screen below and press

[Enter].



☞ **TIP)**

- **Since the distance between Decoder and Cutter is already measured at the factory, it doesn't have to be measured again.**
- **If the distance between the Decoder and Cutter is measured again, the origins of all clamps should be measured again.**

WARNING

- **Before using the clamp, be sure to set up the origin in advance.**
- **If the distance between Decoder and Cutter is automatically measured, be sure to replace the Cutter with Decoder.**
- **The origin of clamp cannot be measured by Cutter.**

◈ Auto Setting

1. Press

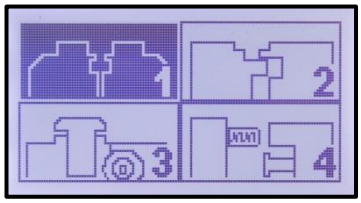
[Menu] button.

2. Press button to select **[2. Clamp Origin]** and press

[Enter] button.

3. Select **Clamp** and press

[Enter] button.

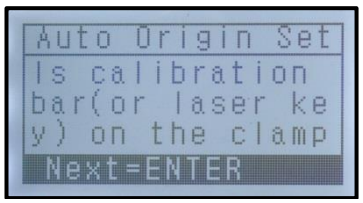


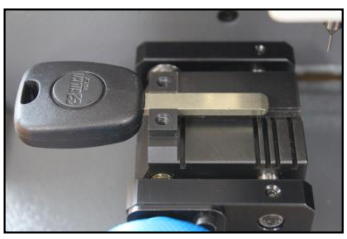
4. Select **[1.Auto**] and press

[Enter] button.

5. Fix the **center measuring bar as given when this product is delivered** or a laser key whose side is flat to the top of the clamp and press

[Enter] button. For **laser keys, make sure to use an end-reference key.**





6. If

[Enter] button is pressed, the decoder will sense the key fixed to the clamp and measure the Origin of the clamp automatically.

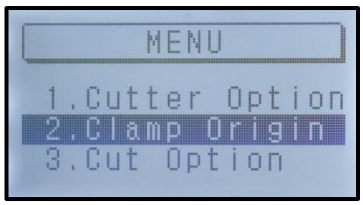
◈ Manual Setting

1. Press

[Menu] button.

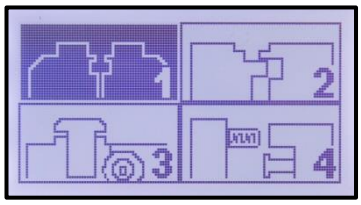
2. Select **[2. Clamp Origin]** and press

[Enter] button.



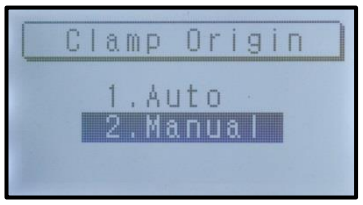
3. Select **Clamp** and press

[Enter] button.



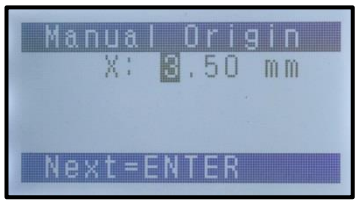
3. Select **[2.Manual]** and press

[Enter] button.



4. Once the manual setting menu is accessed, X- Origin value appears as seen below. If

[Enter] button is re-pressed, Y- Origin value will appear.



5. If the Origin value needs to be changed, press any number key. The number on which the cursor is located will be changed and press button to change the current cursor location if needed. Once entering is completed, press

[Enter] button.

WARNING

● The Origin value above is an example. Do not use this value for the actual product.

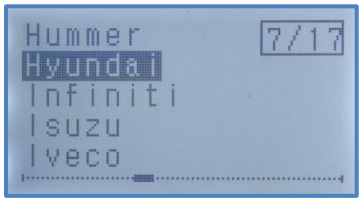
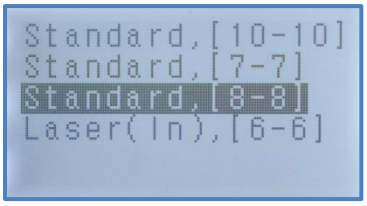
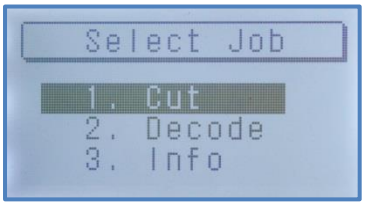
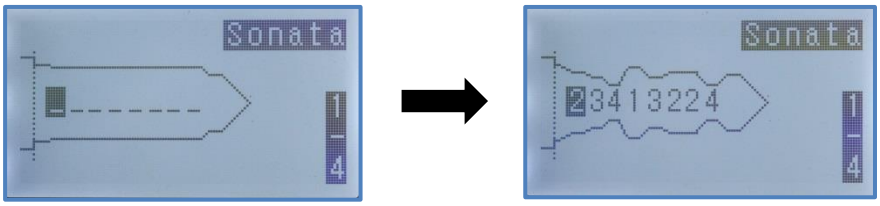
☞ TIP)

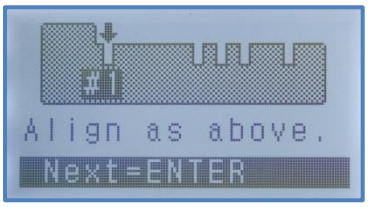
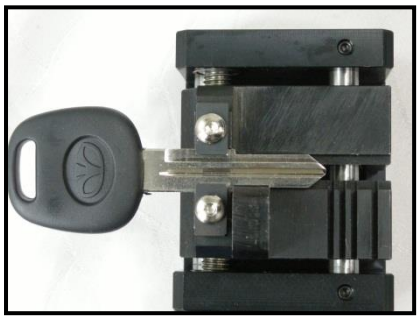
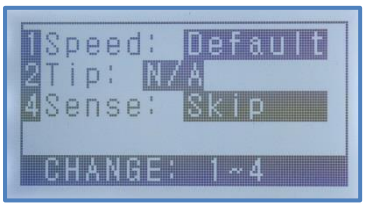
● After changing, make sure to note X and Y-Origin values for convenient follow-up maintenance.

Key Cutting Procedure

◈ Standard key

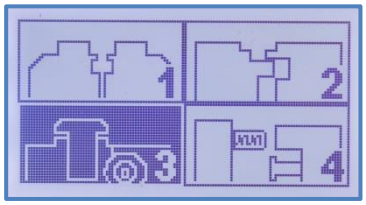
E.g.) Maker: Hyundai
Vehicle Type: Sonata [EF]
Key Type: Standard key
Reference: Shoulder

1,		Press Vehicle Key button from the initial screen to import the Manufacturer List.
2.		Select **"Hyundai"** from the Manufacturer List and press **[Enter]** button.
3.		Select a Model and press **[Enter]** button.
4.		Enter the key type to be cut and press **[Enter]** button.
5.		After selecting Cut Key and press **[Enter]** button.
6.	 Enter bitting with number buttons and press **[Enter]** button.	

	☞ TIP) ● **If there are more than 6 digits of bitting, press either** **or** **to move to the previous or next digit.**	
7.	 	After attaching a key to the clamp by using the stopper as seen in the figure, press **[Enter]** button. (See tips for fixing keys)
8.		After setting processing options depending on the key materials status, press **[Enter]** button to start processing.

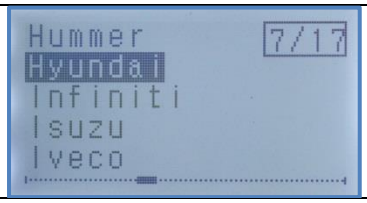
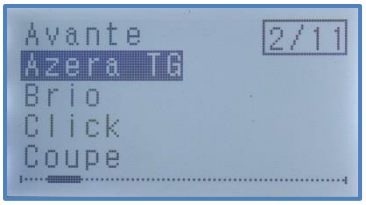
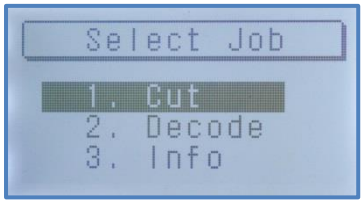
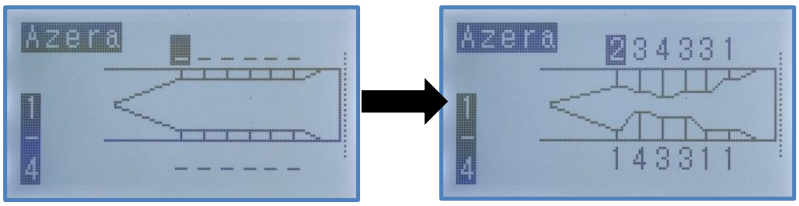
☞ TIP)

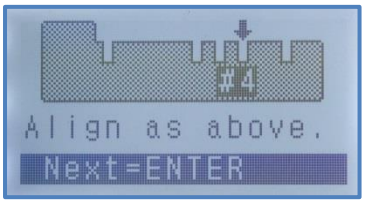
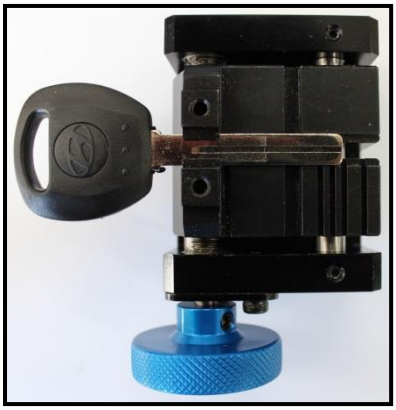
● **From No. 7 screen, press** **[Menu] button and select single blade key clamp, and replace the clamp to process the key.**



◈ Laser key

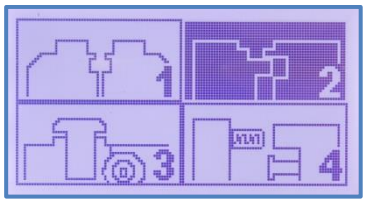
E.g.) Maker: Hyundai
Vehicle Type: Azera TG
Key Type: Laser key
Reference: Tip

1,		Press Vehicle Key button from the initial screen to import the Manufacturer List.
2.		Select **"Hyundai"** from the Manufacturer List and press **[Enter]** button.
4.		Select a Model and press **[Enter]** button.
5.		Enter the key type to be cut and press **[Enter]** button.
6.		After selecting Cut Key and press **[Enter]** button.
7.	 Enter bitting with number buttons and press **[Enter]** button. ☞ TIP) ● **If there are more than 6 digits of bitting, press either** **or** **to move to the previous or next digit.**	

8.	 	After attaching a key to the clamp by using the stopper as seen in the figure, press **[Enter]** button. (See tips for fixing keys)
9.		After setting processing options depending on the key materials status, press **[Enter]** button to start processing. ☞ **Processing Option (See page 30)**

☞ TIP)

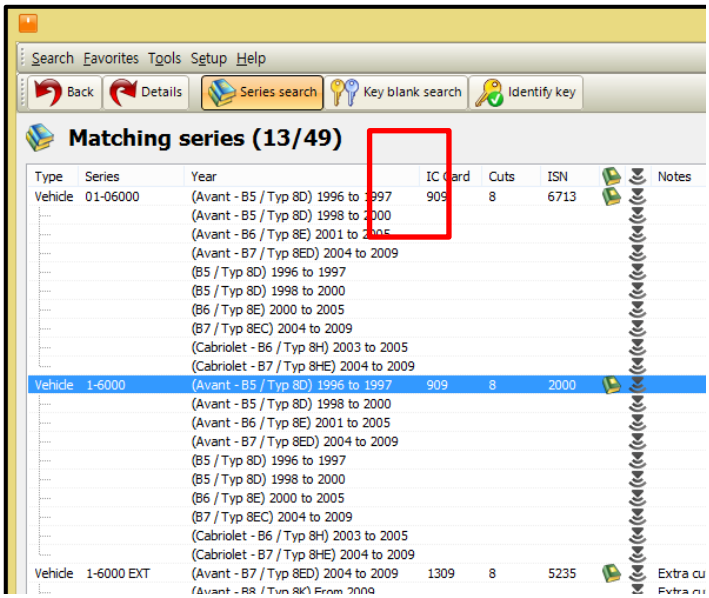
- **From No. 8 screen, press** **[Menu] button and select Dimple key clamp, and replace the clamp to process the key.**



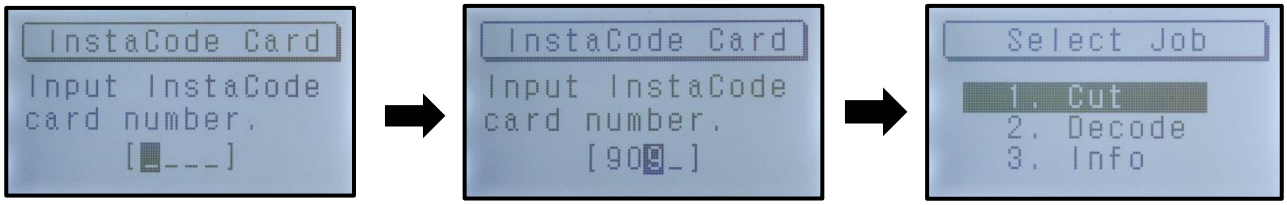
◈ Cut Key by using IC Card number

It is possible to import key data by entering “IC Card” number registered with InstaCode.

E.g.) Maker: Audi
Vehicle Type: A4
IC Card No. : 909


Search Favorites Tools Setup Help
Back Details Series search Key blank search Identify key
Matching series (13/49)
Type Series Year IC Card Cuts ISN Notes
Vehicle 01-06000 (Avant - B5 / Typ 8D) 1996 to 1997 909 8 6713
Vehicle 1-6000 (Avant - B5 / Typ 8D) 1996 to 1997 909 8 2000
Vehicle 1-6000 EXT (Avant - B7 / Typ 8ED) 2004 to 2009 1309 8 5235 Extra cu

Press button to perform the following work as seen in the figure below.



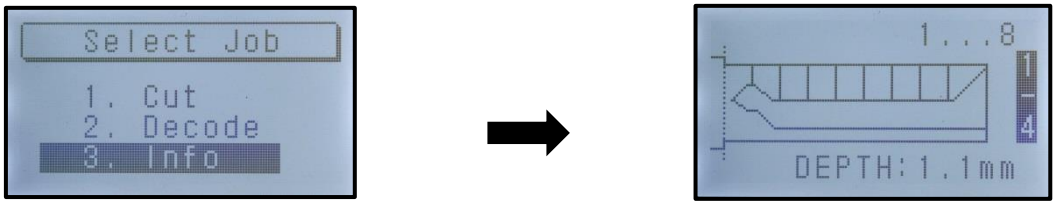
Press button to make LCD screen for entering key code appear.

Enter **“IC Card Number”** with number buttons.

Press **[Enter]** button to make Cut Key screen appear.

☞ TIP)

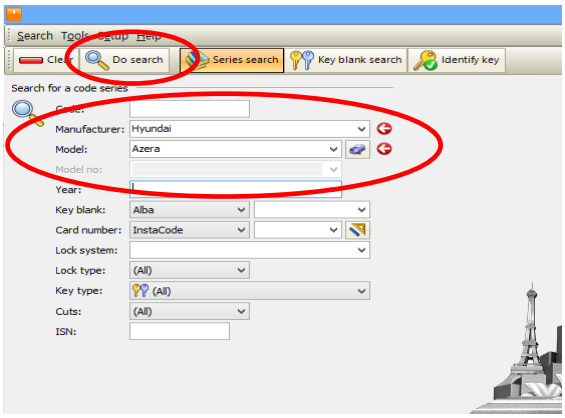
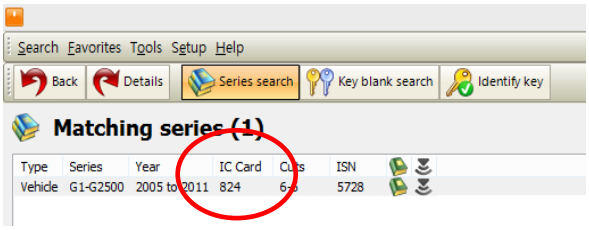
- When entering code numbers, make sure to press button for entering numbers one by one.
- If there are more than 6 digits, enter the number by pressing the applicable number key twice, ranging from No. 1 to No. 5 button.

Select View Key Info and Enter it to see information on the key.


◈ IC Card is...

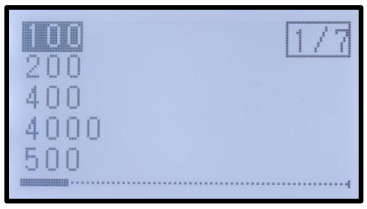
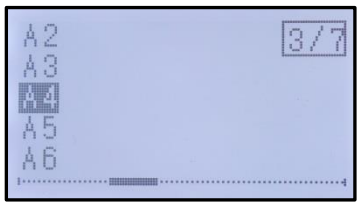
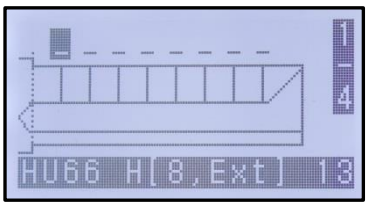
This is the registration number of the key data in the InstaCode Program. You can search the key data in the InstaCode to check **"IC Card"** number.

E.g.) Manufacturer: Hyundai
Model: Azera

	1. Select **"Hyundai"** in **"Manufacturer."** 2. Select **"Model."** (Grandeur [TG] is registered as **"Azera"** in the instar code.) 3. Press **"Do search".**
	You can check Grandeur TG's **"IC Card" number: "824"**

Search for Use the Key Type

E.g.) Manufacturer: Audi
Model: A4
Key Type: HU66

1,		Press Vehicle Key button from the initial screen to import the Manufacturer List.
2.		Select **"Audi"** from the Manufacturer List and press **[Enter]** button.
3.		Press button and move to the next page.
4.		Select a model and press **[Menu]** button.
5.		Select a key material manufacturer and press **[Enter]** button.
6.		Enter the key type to be cut and press **[Enter]** button.
7.		LCD data screen appears.

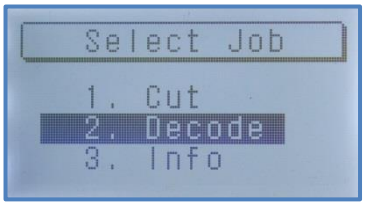
Original Key Copy

Miracle-A6 provides a function to copy the original key by using the decoder.

1. Replace the tool with the decoder.
2. Press

[InstaCode Card Number or Model] button to select a model.
3. Select **[2. Copy Key]** and press

[Enter] button.



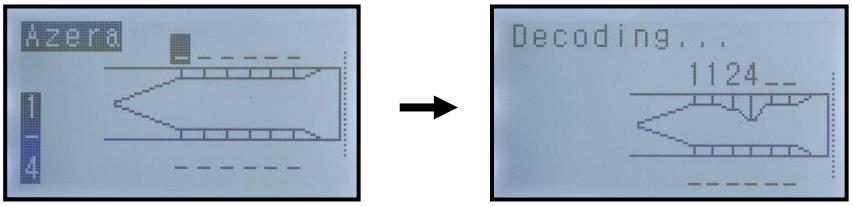
4. Attach the original vehicle key to the clamp and press

[Enter] button.

☞ **TIP)**

- **When decoding, use the original conductive key only , otherwise the decoder might be broken.**

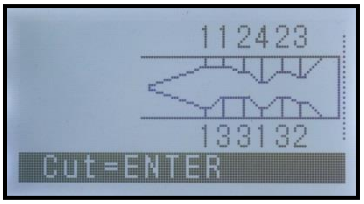
5. The decoder measures the key automatically as seen in the figure below.



6. Once decoding is completed, it asks whether to cut a key or not. If you want to cut a key, press

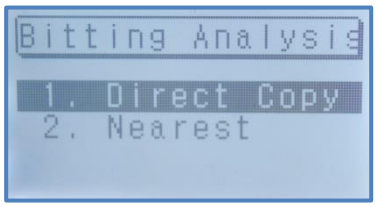
[Enter] button. If you want to cancel, press

button.



7. To cut a key after decoding, press

[Enter] button and select a method to change codes as seen in the figure below to replace the tool with the cutter following the instruction on the screen.



☞ **Direct Copy**

- The decoder cuts a key with the measured values.

☞ **Nearest**

- The decoder calculates the measured values of the key and converts to the nearest code applying round up or off in order to cut a key.

8. After attaching a new key to be cut to the clamp as per the instructions on the screen, start cutting a key.

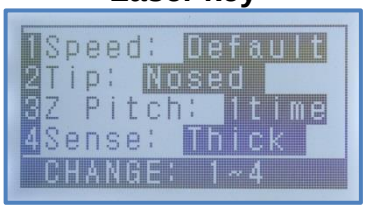
- **Since measuring deviation may occur if the sensing decoder is bent, it is designed to be cut if any excessive force is applied, as much as the decoder is bent.**
- **Since the sensing decoder can be easily broken, be especially cautious about dropping, impact or handling accidents.**
- **Decoding may result in inaccurate results, depending on key status, key fixing status or the accuracy of chin or end reference.**
- **The company is not liable for a broken decoder in any circumstance.**

Key Cut Option

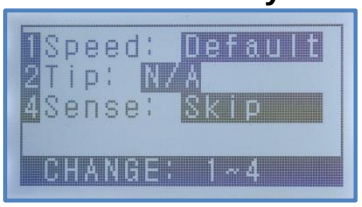
Miracle-A6 can perform accurate key processing by configuring the processing option according to the type of key and the strength of the material.
The processing option can be changed by pressing the number button on the left side of the option item.

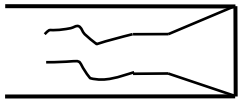
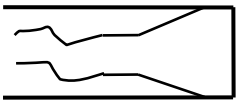
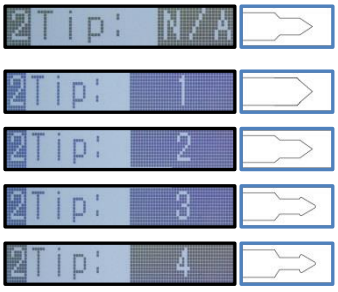
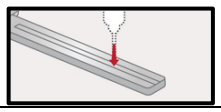
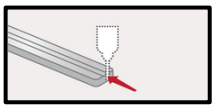
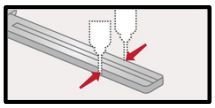
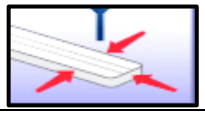
◈ Processing option configuration screen

Laser key



Standard key



1. Speed	● Basic Speed: Basic Processing ● Brass: High Speed Processing ● Nickel: Standard Processing ● Iron: Low Speed Processing ● Once: Manufacture at once	
2. The shape of the end and end pin configuration	The shape of the end can be configured when processing the laser key. ● Basic  ● Original 	Select the end bitting of the key where there is a belly pin among the types of standard keys for processing.  2Tip: N/A — Cut a 2.5 deep 2Tip: 1 — Cut a 1 deep 2Tip: 2 — Cut a 2 deep 2Tip: 3 — Cut a 3 deep 2Tip: 4 — Cut a 4 deep
3. Stages for depth	● One time: Process the depth of Z axis once. ● Two times: Process the depth of Z axis two times.	
4. Measurement	1. Do not measure	
	2. Measure thickness 	This is the function to be used in laser key processing. It prevents clamp damage by measuring the height of the key automatically.
	3. Measure the length of the end 	It is only available when the key for processing is end referenced. After the length of the key is measured, it is processed.
	4. Measure the center of the key 	It is available regardless of the type of the key for processing. After measuring the center of the key, it is processed. (It is used only when there is a tolerance in key materials.)
	5. Measure the whole 	It is only available when the key for processing is end referenced. After measuring the length and center of the key, it is processed.

Half Cut Method

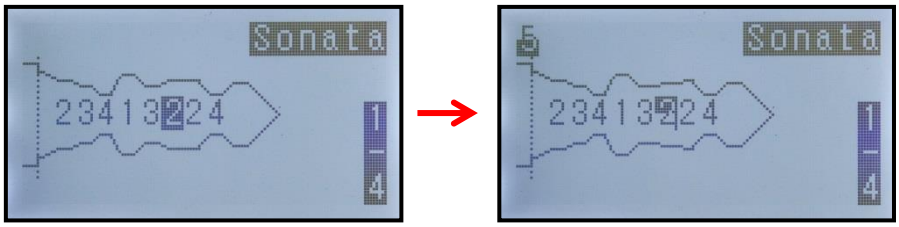
Half Cut method means the method of manufacturinge the key with 1.5, which is between 1 and 2, or 3.5 which is between 3 and 4, when it is impossible to select either 1 and 2, or 3 and 4, or it means the method of manufacturing the key by using the structural tolerance of the cylinder when the inside bitting of the cylinder is uncertain.

◈ How to enter Half Cut code

[Method 1]

1. Enter the bitting numbers in LCD screen.
2. Choose the number by use the **[button].**
3. Press

button to convert to Half Cut Code. At this time, the half of the number becomes dark to indicate it is to be half-cut.
4. If Half Cut key is pressed, .5 is automatically entered as default. At this time, you may change the number in decimal point by pressing or button.



5. Press or

[Enter] button to move to the next digit.

[Method 2]

1. Press

button repeatedly and move to the next digit until you see the Half Cut Code you want.

Whenever you press

buttons, the Half Cut Code will be changed as following

1.5 → 2.5 → 3.5 → 1.5 → …

2. Press or

[Enter] button to move to the next digit.

CodeMaster

The Most Innovative Key Cutting Solution, 'MIRACLE'
Software: 7.0, B130809
Firmware:
MIRACLE-A6
- Fully Automated Key Cutting Machine
Automobile
Motorcycle
Barcode
Standard
Last Key
Cut History
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Favorite
Dimple
Tubular
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http://www.miraclekey.com
?
Copy
Cut History Mgr
Setup

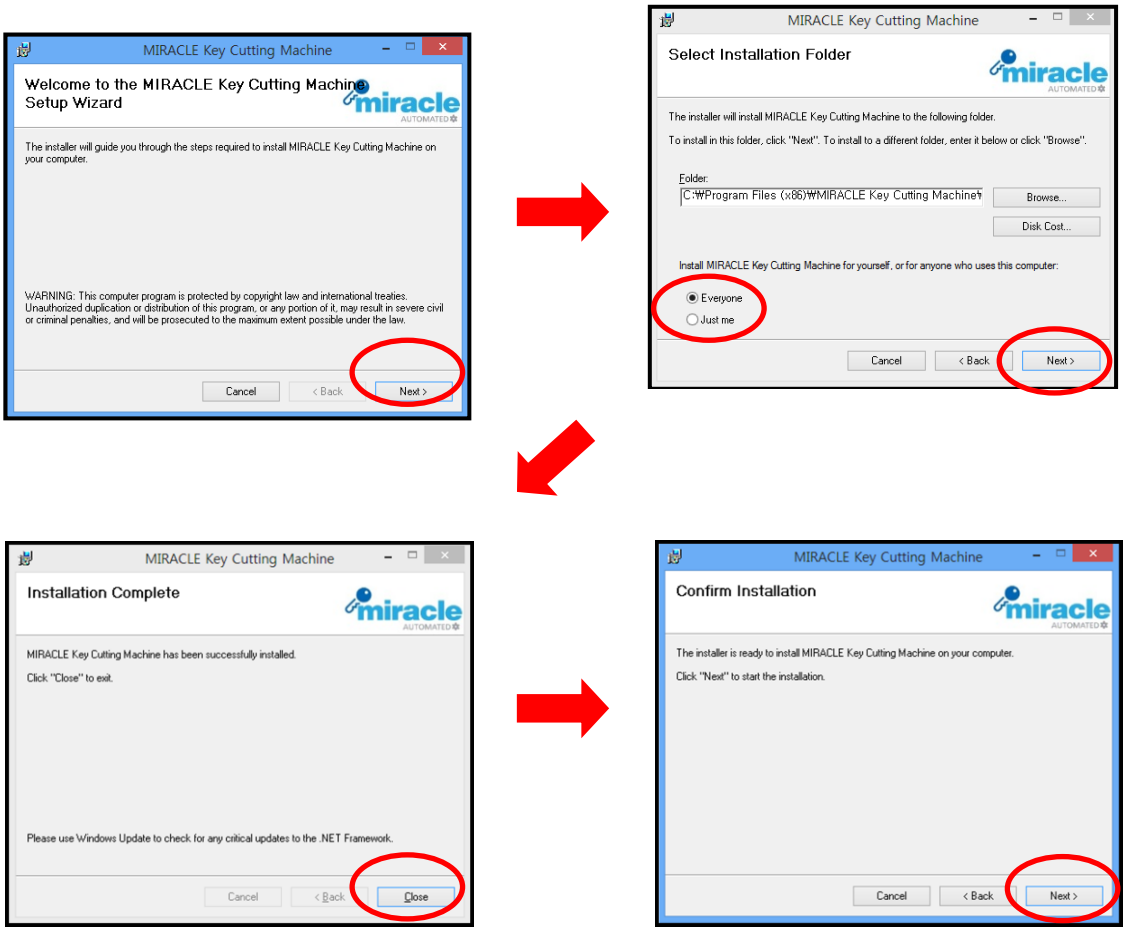
Program Installation (Portal to Miracle)

The program can be run by a computer through a USB flash drive. Users can upgrade the program and key data directly.

[Program installation]

1. Insert the supplied CD in a computer and run the installation program.

2. Install the program in the order of directions shown in the pictures below.


MIRACLE Key Cutting Machine
Welcome to the MIRACLE Key Cutting Machine Setup Wizard
The installer will guide you through the steps required to install MIRACLE Key Cutting Machine on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >
MIRACLE Key Cutting Machine
Select Installation Folder
The installer will install MIRACLE Key Cutting Machine to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:₩Program Files (x86)₩MIRACLE Key Cutting Machine₩
Browse...
Disk Cost...
Install MIRACLE Key Cutting Machine for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >
MIRACLE Key Cutting Machine
Installation Complete
MIRACLE Key Cutting Machine has been successfully installed.
Click "Close" to exit.
Please use Windows Update to check for any critical updates to the .NET Framework.
Cancel
< Back
Close
MIRACLE Key Cutting Machine
Confirm Installation
The installer is ready to install MIRACLE Key Cutting Machine on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

3. If the program is successfully installed, **"Portal to Miracle"** icon will be created on desktop as below.

Connecting to Computer and Run the Program

◈ Bluetooth wireless connection

If a computer has Bluetooth wireless communication device, or separate Bluetooth external device (USB dongle), the product can be operated by using code master program through Bluetooth communication configuration.

☞ TIP)

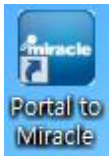
● The configuration method of Bluetooth varies subject to PC and Windows OS, and the configuration method with external Bluetooth device is also different by Bluetooth products

◈ USB cable connection

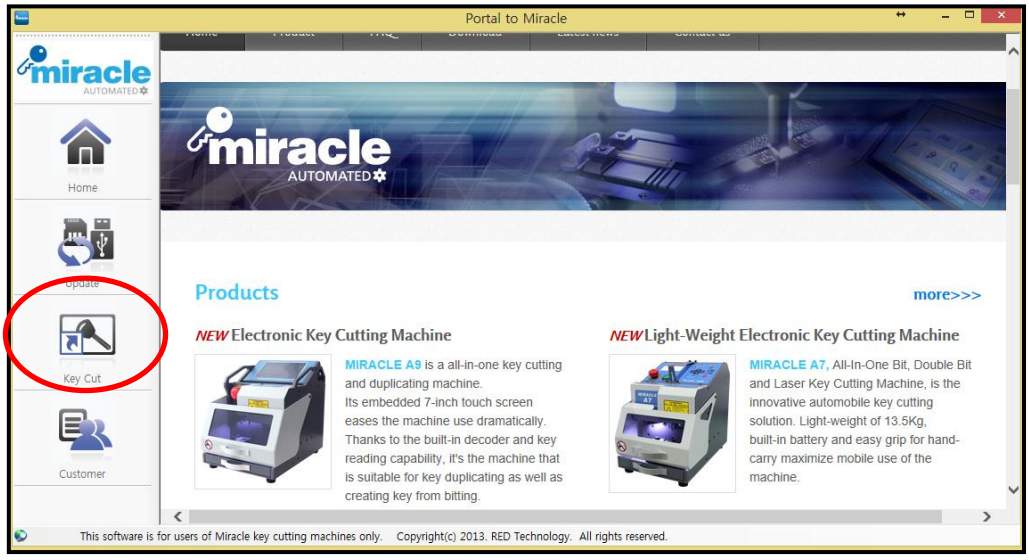
Install the USB driver into the computer and connect the cable.

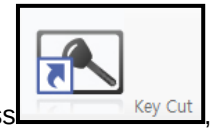
Connect the USB cable to the USB port located on the back of the product as shown in the left picture.

◈ Portal to Miracle Program

1. Click 

on the desktop to run the program as below.


Portal to Miracle
miracle
AUTOMATED
Home
Update
Key Cut
Customer
Products
more>>>
NEW Electronic Key Cutting Machine
MIRACLE A9 is a all-in-one key cutting and duplicating machine.
Its embedded 7-inch touch screen eases the machine use dramatically.
Thanks to the built-in decoder and key reading capability, it's the machine that is suitable for key duplicating as well as creating key from bitting.
NEW Light-Weight Electronic Key Cutting Machine
MIRACLE A7, All-In-One Bit, Double Bit and Laser Key Cutting Machine, is the innovative automobile key cutting solution. Light-weight of 13.5Kg, built-in battery and easy grip for hand-carry maximize mobile use of the machine.
This software is for users of Miracle key cutting machines only. Copyright(c) 2013. RED Technology. All rights reserved.

2. Press 

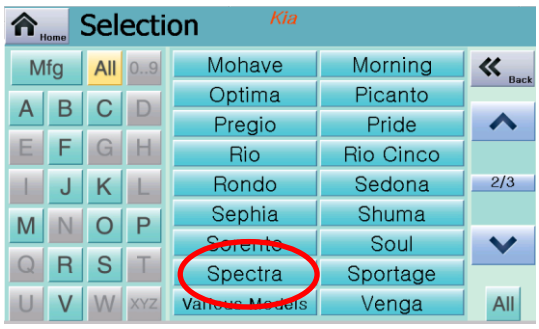
, then the key making program which has same screen as the Miracle-A6 will be shown on the computer screen.

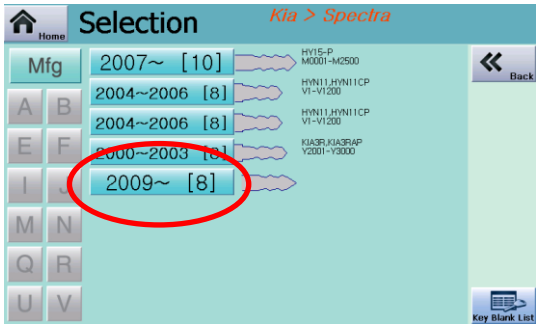
Basic Menu

1) Automobile Key

- When you press Automobile Key in the initial screen, a list of manufacturer appears.

Move to the next screen pressing the arrow.





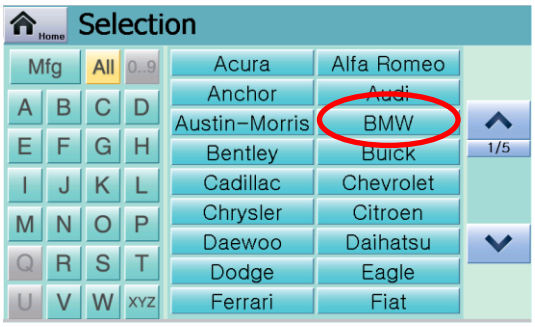
Select the manufacturer, model and year for the operating key and load the data.

[Selection in Key List]

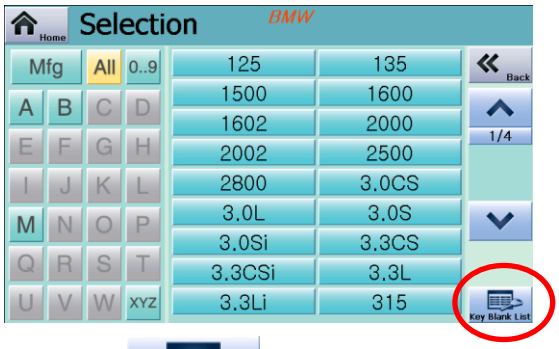
e.g.) Manufacturer: BMW
Model: M3
Year: 2011
Key manufacturer: SILCA
Key blank: HU92

Select the relevant manufacturer and vehicle and press

located in the lower right of the screen to open the key data in the list of key manufacturer.

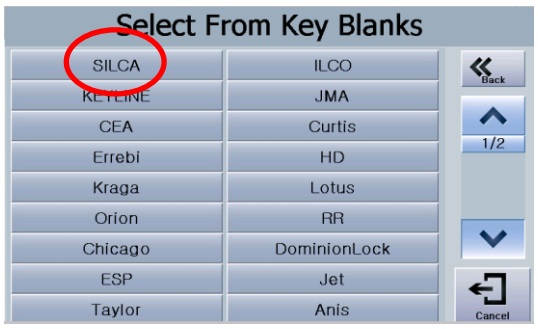


1. Select BMW in the manufacturer list.

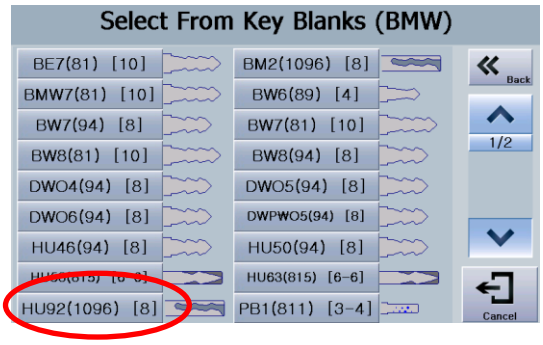


2. Press

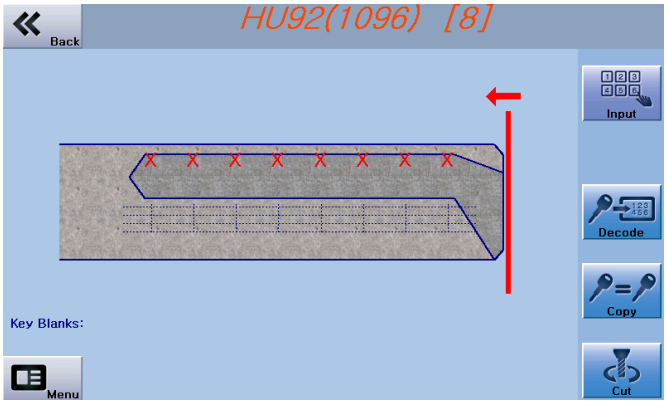
in the lower right of the screen.



3. Select the key blank.



4. Select HU92.



When you know the exact name of the operating key blank, you can select it from the key list to open the data.

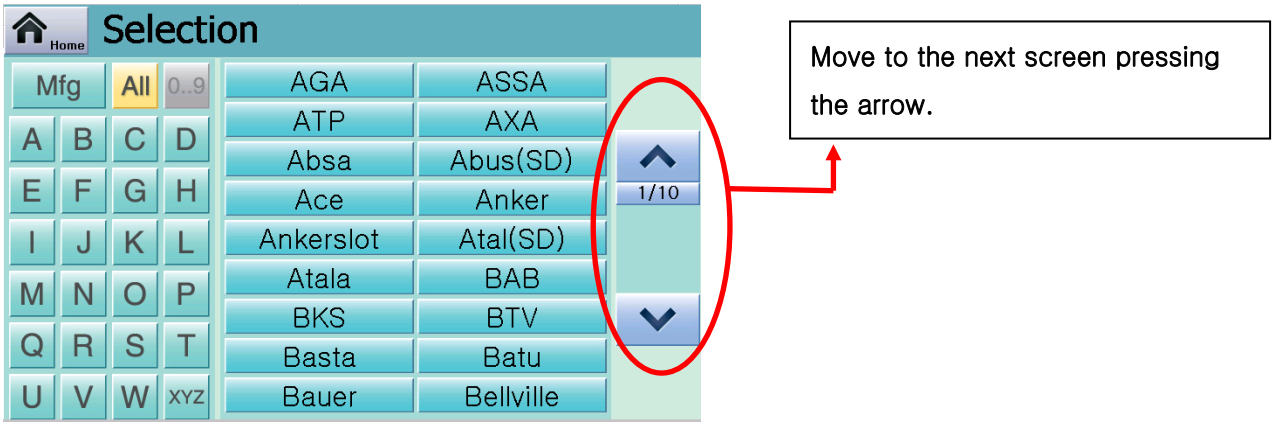
2) Motorcycle Key

- When you press Motorcycle Key in the initial screen, a list of Motorcycle Key manufacturer appears.

Select the manufacturer, model and year for the operating key and load the data.

3) Standard Key (Domestic Key)

- When you press Standard Key in the initial screen, a list of general key manufacturer appears.



Select the manufacturer and model of the operating key and load the data.

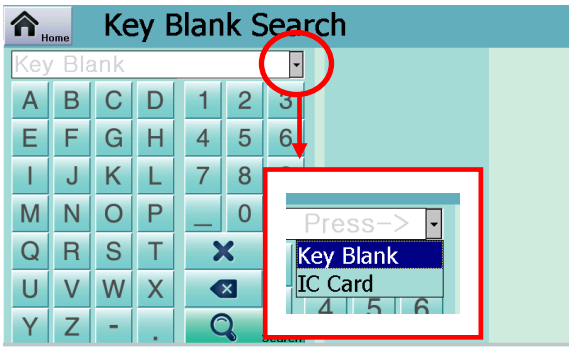
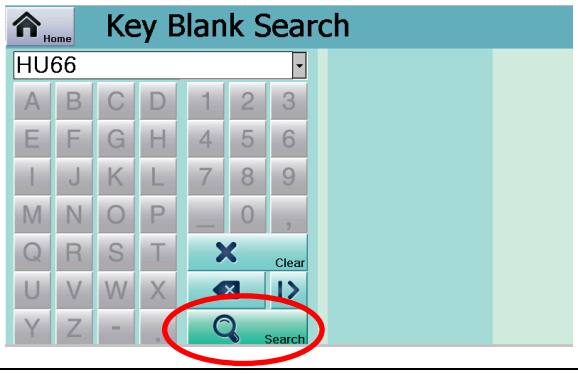
4) Key Blank Search

- You can search the key data easily and there are two search methods.

[Search by Key Type Name]

When you know the key type of the relevant model:

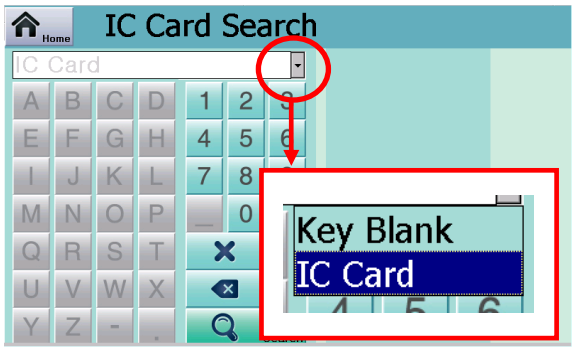
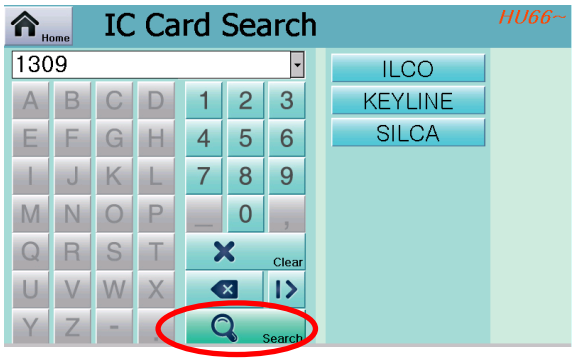
e.g.) **Manufacturer: Audi**
Model: A4
Key manufacturer: SILCA
Key blank: HU66

	1. Press in the initial screen.
	2. Press the arrow indicated in the red circle and change the key search method to **"Key Blank."**
	3. Enter the key type and press .

	4. Select the key manufacturer and load the data.

[“IC Card” **Search]**

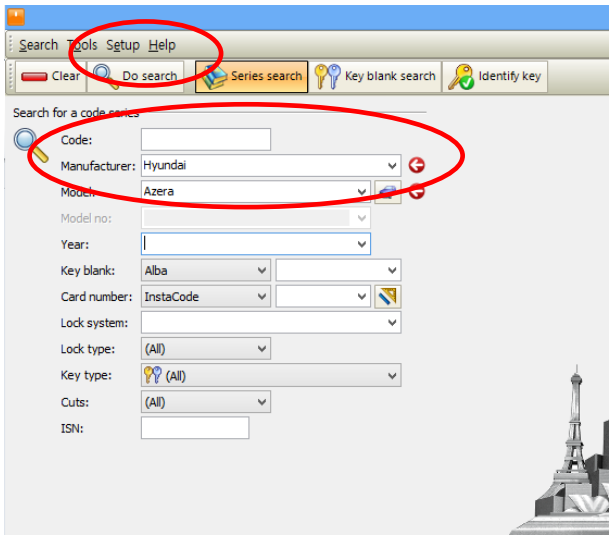
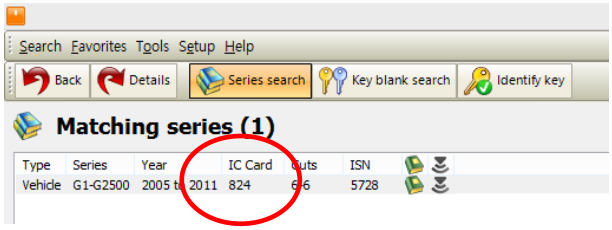
You can search the key data by entering **“IC Card”** number registered in InstaCode.

	1. Press in the initial screen.
	2. Press the arrow indicated in the red circle and change the key search method to **“IC Card.”**
	3. Enter **“IC Card”** number and press to load the data.

* IC Card is… *

This is the registration number of the key data in the InstaCode Program. You can search the key data in the InstaCode to check **"IC Card"** number.

e.g.) Manufacturer: Hyundai
Model: Azera

	1. Select **"Hyundai"** in **"Manufacturer."** 2. Select **"Model."** (Grandeur [TG] is registered as **"Azera"** in the instar code.) 3. Press **"Do search".**
	You can check Grandeur TG's **"IC Card" number: "824"**

Convenient Features

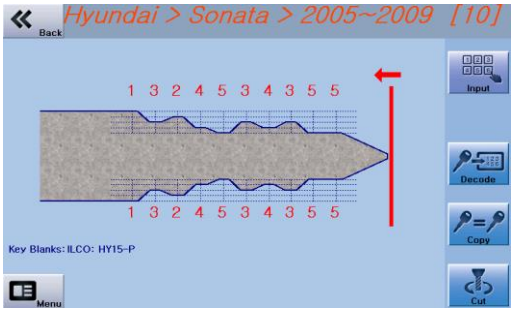
Miracle-A6 offers various convenient features for users.

[Convenient Features]

1.		Press the button to view the previous key data.
2.		Press the button to view the key data record.
3.		Register the frequently used key in “Favorite” for faster and easier data reading. You can view the key data list added to Favorite.
4		Register the frequently used key in “Favorite” for faster and easier data reading. You can view the key data list added to Favorite.

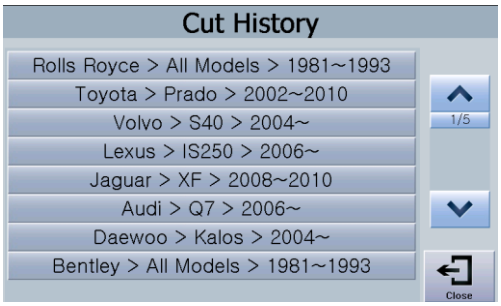
1) Previous Key Data View

Press the above button to load the previous key data Automatically

	You can read previous key data for reworking.

2) Key Cut List View

Press the above button to view the recent key cutting list and data as shown in the below picture.

	You can check the cut key list.

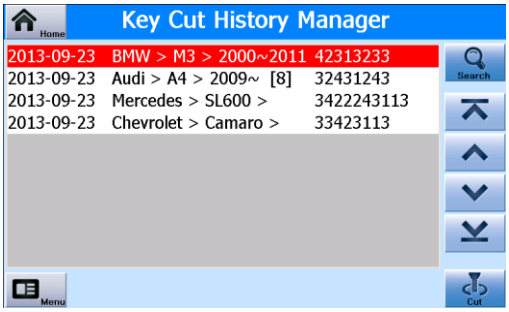
3) Favorite

Press the above button to read the registered frequently used key data.

	You can register the frequently used key data in Favorite for faster data reading.

4) Customer information

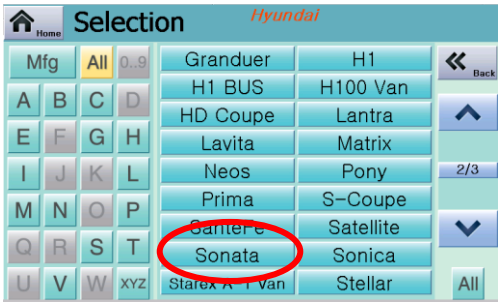
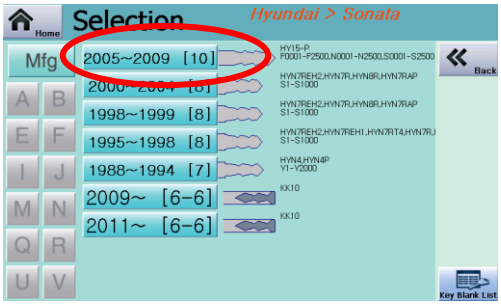
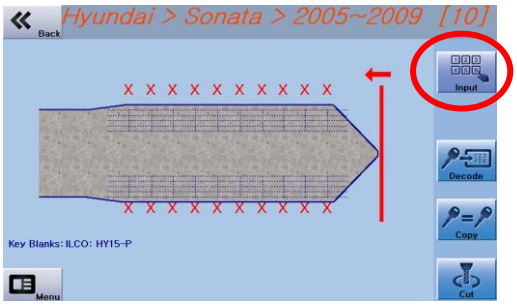
Retrieve the saved customer information.

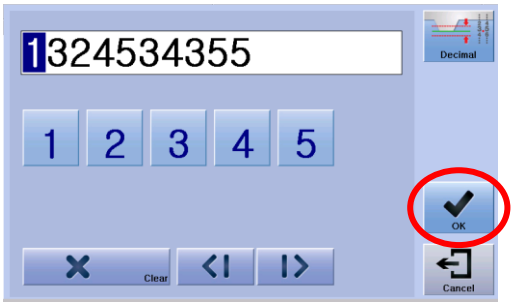
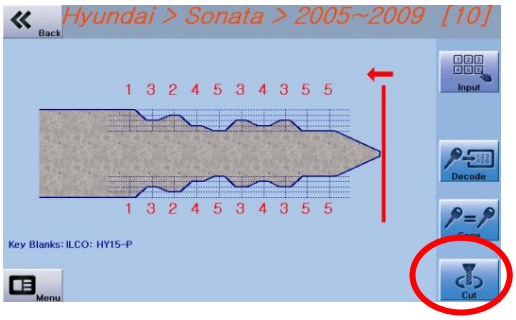
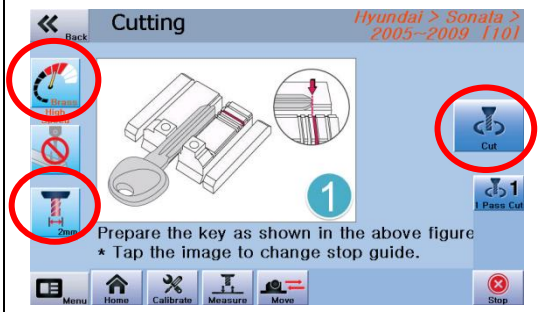
	Data for vehicles and customers you have handled before can be saved and managed. Moreover, when you work for same customer and same vehicle, it can be easier.

Key Cutting Procedure

[Standard Key]

e.g.) Manufacturer: Hyundai
Model: Sonata [NF]
Year: 2007
Align: Tip Align
Key Type: Standard Key

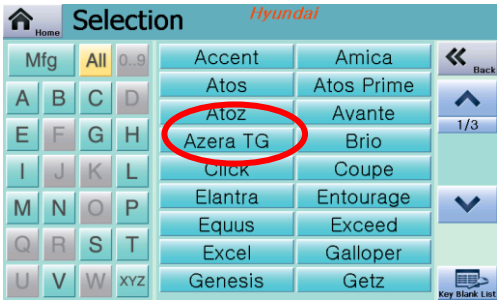
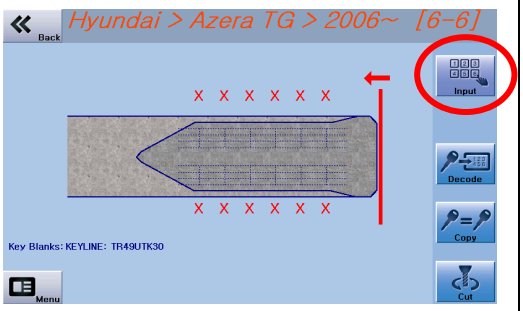
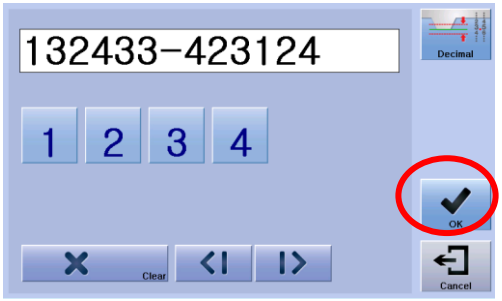
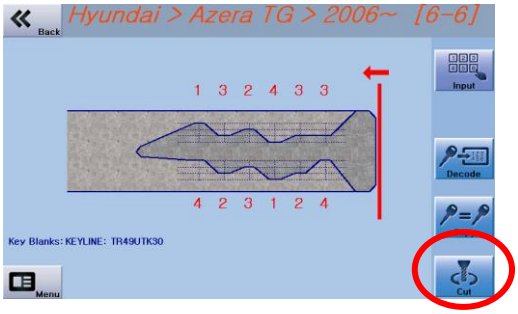
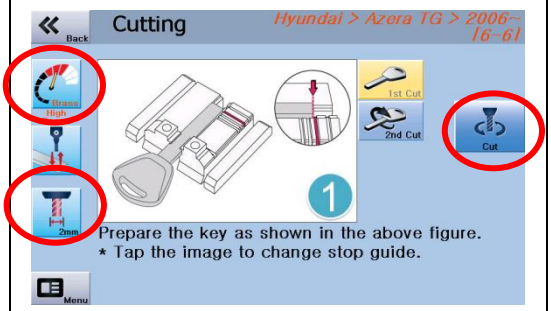
1,		Press Automobile Key in the initial screen to open the list of manufacturer.
2.		Select **“Hyundai”** in the manufacturer list.
3.		Select **“Sonata”** in the model.
4.		Select **“Year”** in list.
5		Press on the upper right of the screen.

6		Enter the bitting in order and press .
7		After checking the bitting, press on the lower right of the screen.
8.		Install the key on the Clamp as explained in the screen. **(refer to key installation methods)** Check speed and tool thickness and press .

[Laser Key]

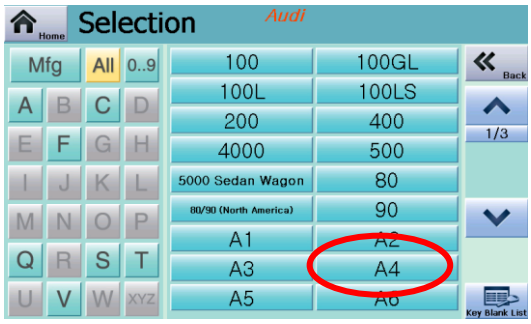
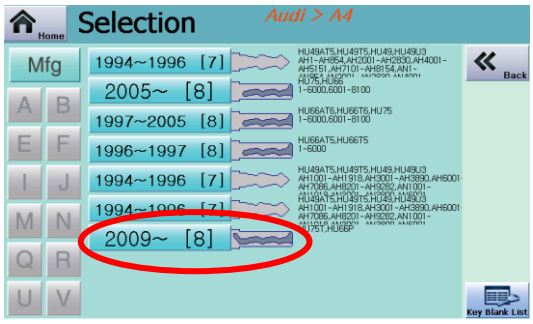
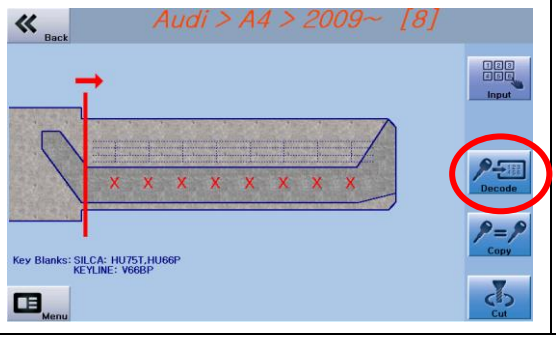
e.g.)	**Manufacturer: Hyundai** **Model: Azera** **Year: 2007** **Align: Tip** **Key Type: Standard Key**

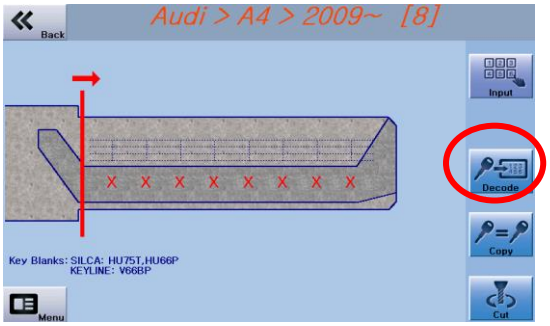
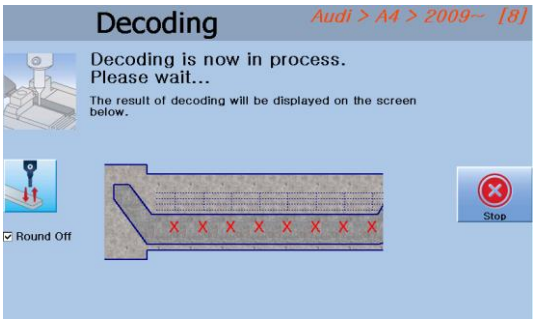
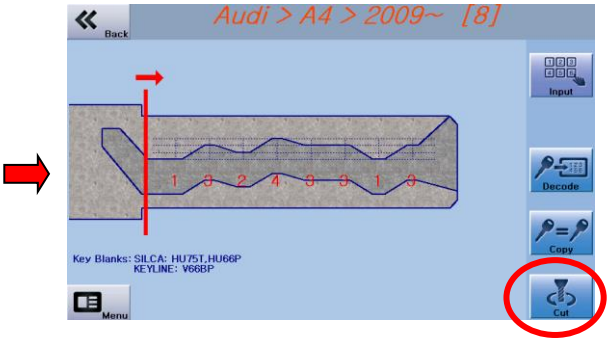
1,		Press Automobile Key in the initial screen to open the list of manufacturer.
2.		Select **“Hyundai”** in the manufacturer list.

3.		Select **"Azera TG"** in the model.
4.		Press on the upper right of the screen.
5.		Enter the bitting in order and press .
6.		After checking the bitting, press on the lower right of the screen.
7.		Install the key on the Clamp as explained in the screen. **(refer to key installation methods)** Check speed and tool thickness and press .

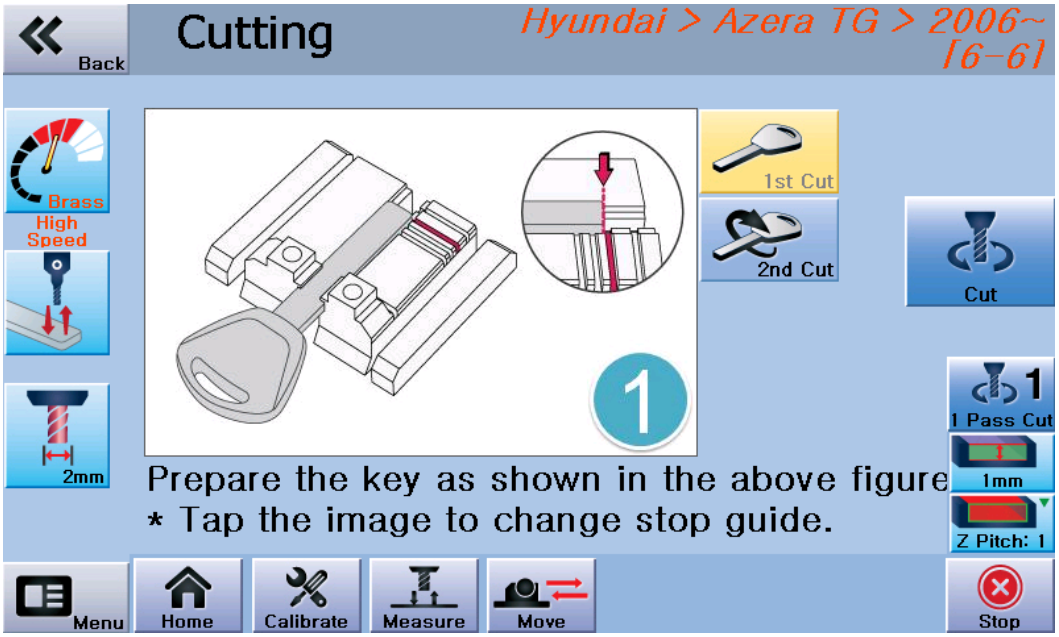
Original Key Copy

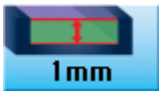
e.g.) Manufacturer: Audi
Model: A4
Year: 2005

1.		Press the Vehicle Key icon in the initial screen to open the manufacturer list.
2.		Select **"Audi"** in the list.
3.		Select **"A4"** in the Vehicle Model list.
4.		Select the Vehicle manufactured year.
5.		Press on the right.

6.		Install the key on the Clamp as shown in the picture **(refer to key installation)** and press the button .
7.	  When decoding is complete, the bitting number appears on the screen.	
8.	When you want to cut the key following the decoded data, hold the new key on the Clamp and press for key cutting.	

Key Cut Option



						
Speed Setting	Auto Key Measure	Cutter Thickness Setting	Cutting Depth Setting	Multi-Stage Cutting Count	Trim	Stop

1) Speed Setting

- You can assign the cutting speed based on density of key materials in four stages: Low-Normal-High-Maximum.

When you press the button, the cutting speed is changed in the following order.

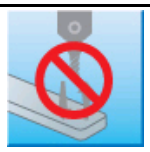
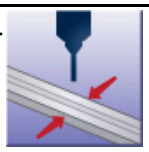
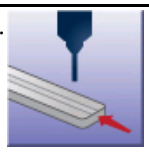
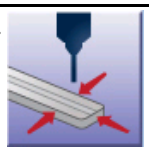
CAUTION

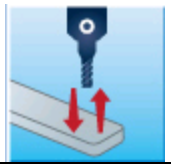
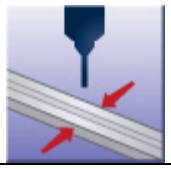
- If you cut key materials with high density at high speed, the cutter may break off or cutting may not be done properly.
- Make sure to assign proper speed based on the nature of material.

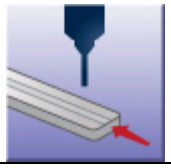
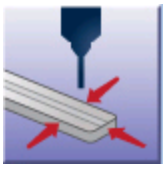
2) Auto Key Measurement

- You can measure thickness, center and length of the key for more accurate key cutting.

When you press the button, the measurement setting is changed in the following order.

1.	2.	3.	4.	5.
				
No Measure	Key Height Measure	Key Center Measure	Key Length Measure	Key Length and Center Measure

	No Measurement
	**Used in Laser Key Cutting.** It automatically measures thickness of the key to prevent Clamp damage and ensure cutting to accurate depth.
	**Used regardless of the reference point of the key.** It automatically measures center of the key (this function is used when there is an error in key materials).

	**Used only for the tip align key.** It automatically measures length of the key. (When the key does not touch the Stopper because it is too short, you can use this function to ensure accurate key cutting.) In this case, you may not need to use the Stopper.
	**Used only for the tip align key.** It automatically measures length and center of the key.

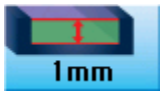
3) Cutter Setting

- You can assign thickness of the Cutter.

Press the button to select the desired Cutter thickness. Cutter setting range is from 1.5mm to 2.4mm.

4) Cutting Depth Setting

- For Laser Key cutting, you can assign cutting depth.



Press the button to select the desired cutting depth in the range of 0.9mm ~ 1.5mm.

5) Multi-Stage Cutting Count

- For Laser Key cutting, you can select the desired button to make cutting in multiple stages.

Press the button to assign the cutting stage up to 3 counts.

6) Trim

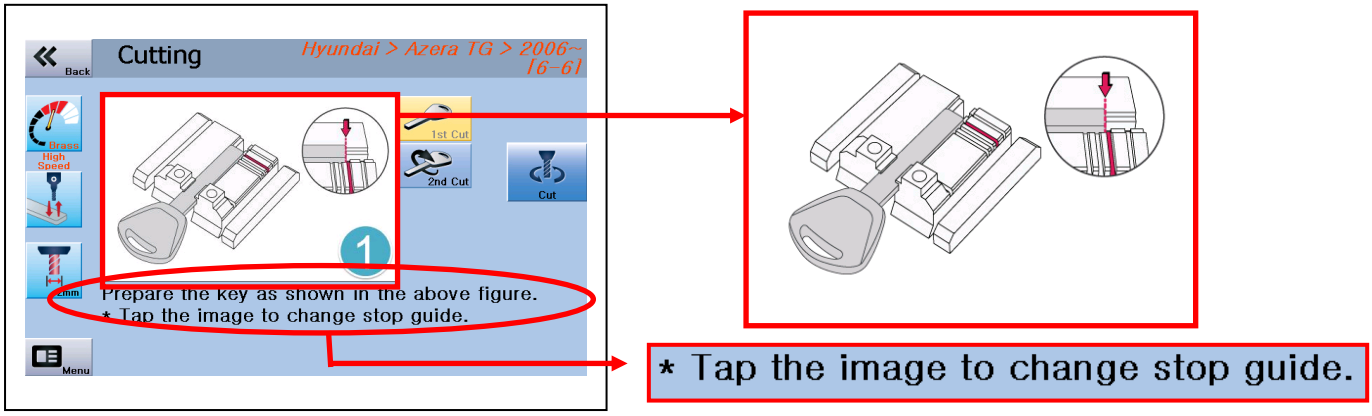
- Press the button to trim the key after cutting.

7) Stop

- Press the button to stop key cutting.

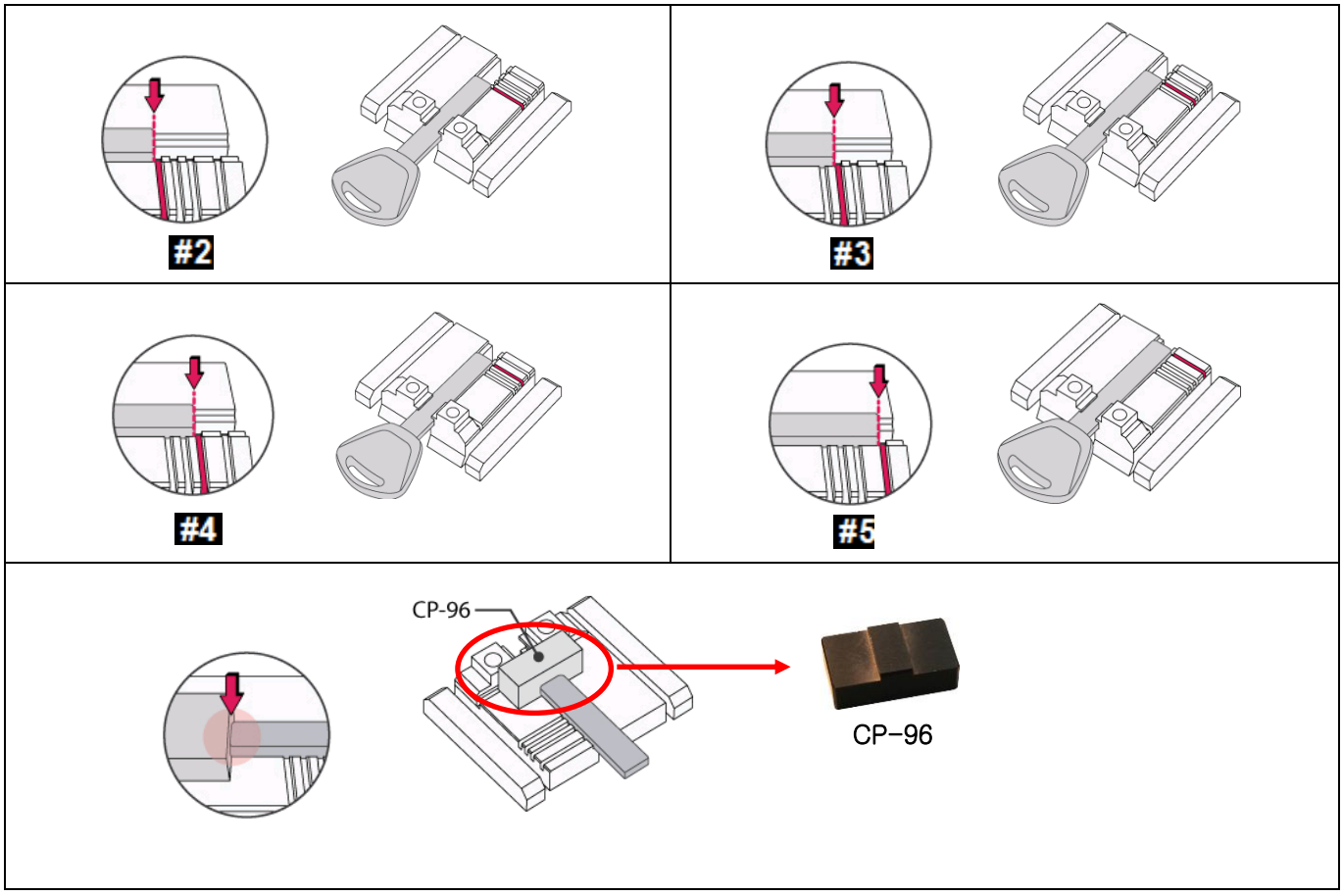
8) Clamp Reference Point Change

- You can change the Stopper position based on the key length.

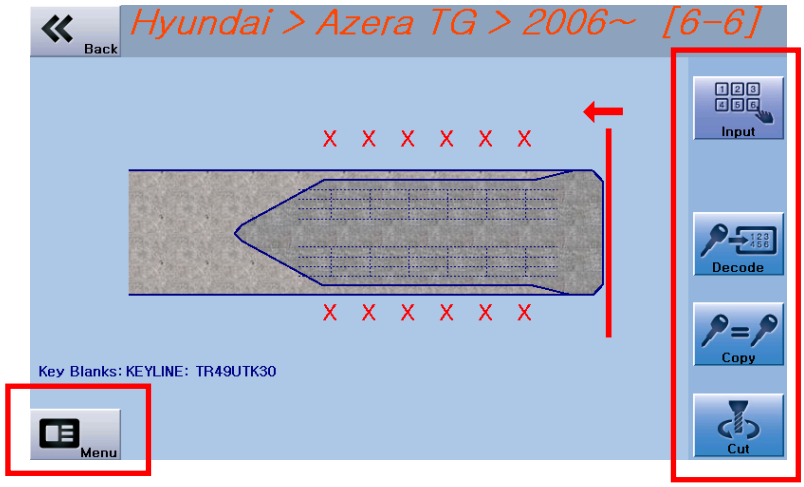


When you press the Clamp picture repeatedly in the cutting setting screen, you can change the Clamp reference point based on the key type and fasten the key material.

☞e.g.) Tip Align Laser Key

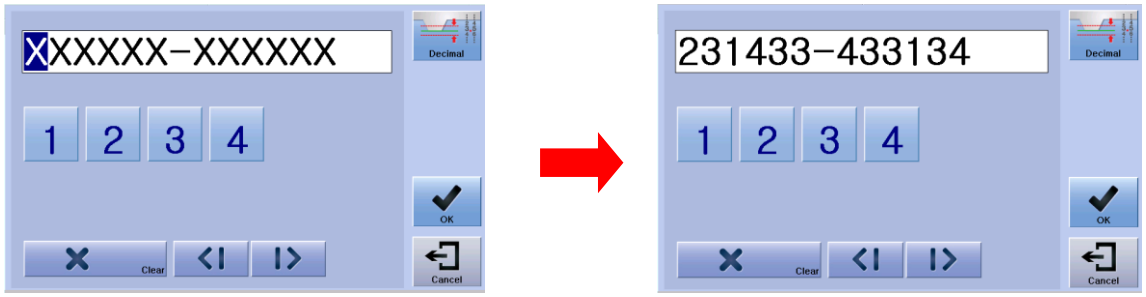


Key Data Load Screen



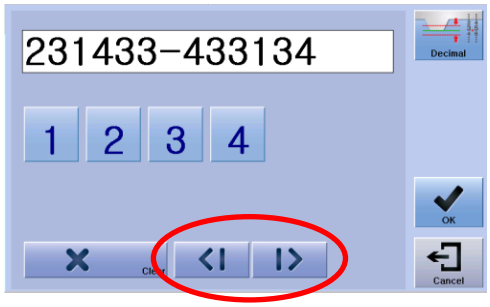
1) Bitting Input

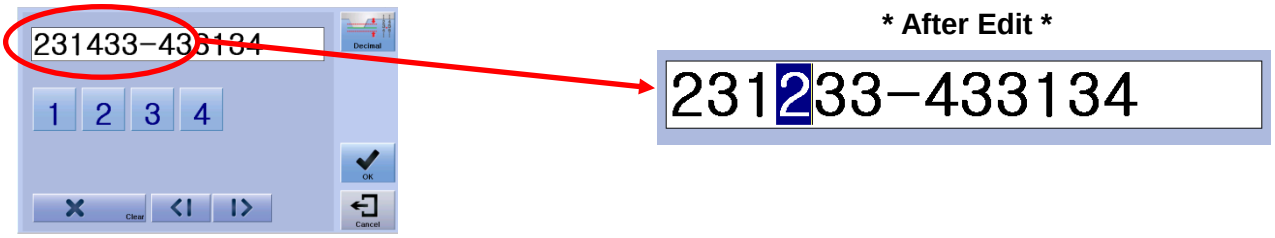
- When you press the button below, the bitting input screen appears. Enter the bitting in number.



[Bitting Edit]

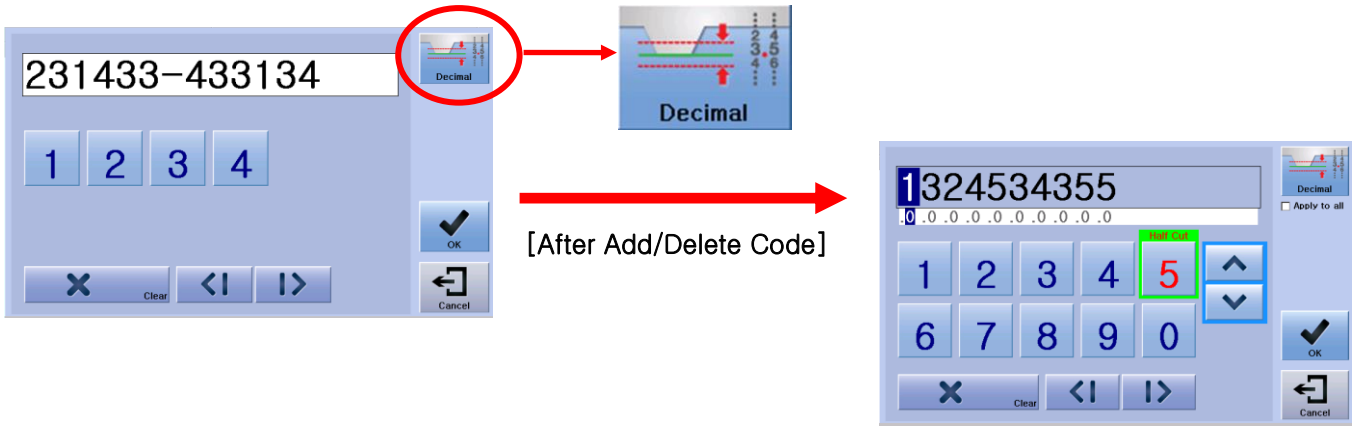
You can edit the bitting by using the arrows at the bottom of the screen or manually changing the number.





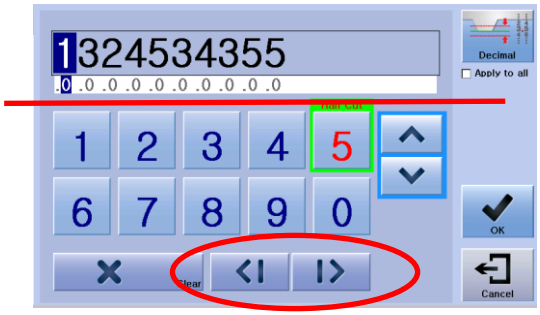
[Add/Delete Code]

You can enter the bitting in the **Decimal** point.



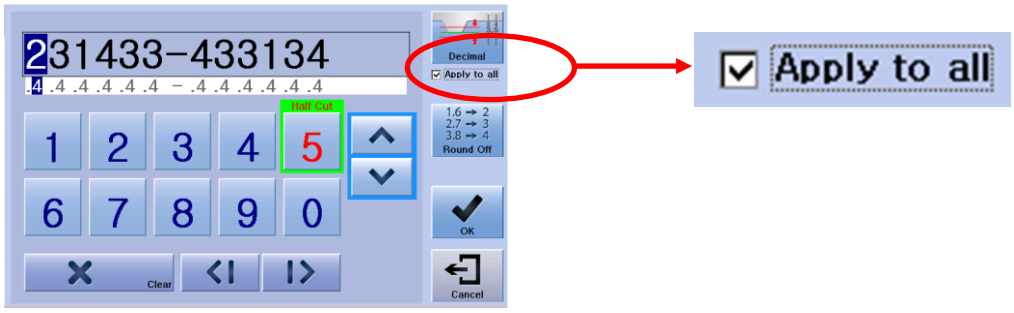
◆ Add/Delete to Individual Bitting

Press the individual bitting you want to add or delete or use the arrows at the bottom of the screen to move to the desired individual bitting. Enter the **Decimal** point.



◆ Add/Delete to Entire Bitting

Press “Add/Delete to Entire Bitting” and enter the **Decimal** point to apply the same number to the entire bitting.



◆ Code Change

Round off the code-added/deleted bitting or the decoded number into the integer to make it into general bitting.

e.g.) **1.2 -> 1 and 1.7 -> 2**

☞ TIP)

- **The bitting in the Decimal point is displayed in blue.**

2) Read/Copy Original Key

- Press the button to read or copy the original key.

(P. See 69)

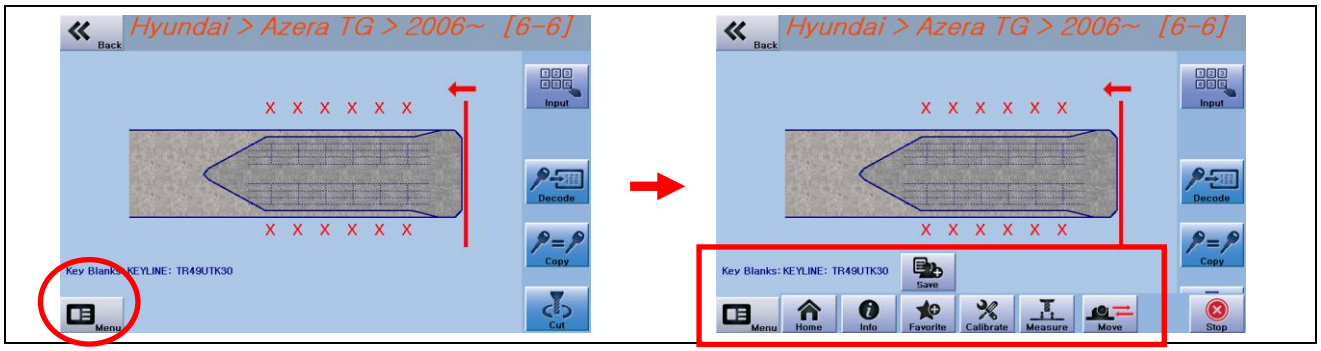
3) Key Cutting

- Press the button to cut the key.

(P. See 56)

4) Menu

- Press the button to display new menu.



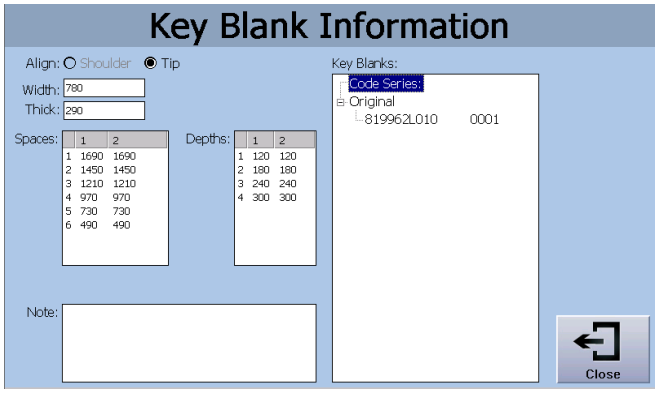
[Home]

Return to the initial screen.

[Info]

It show the key data detail.

Press the button to see the key data detail.

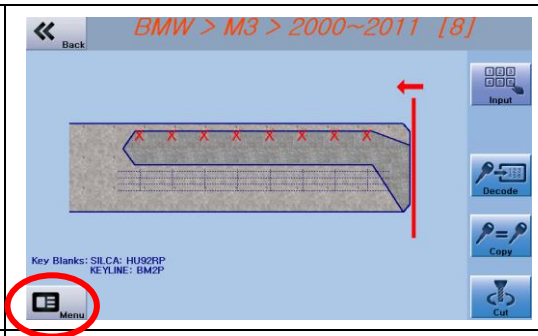
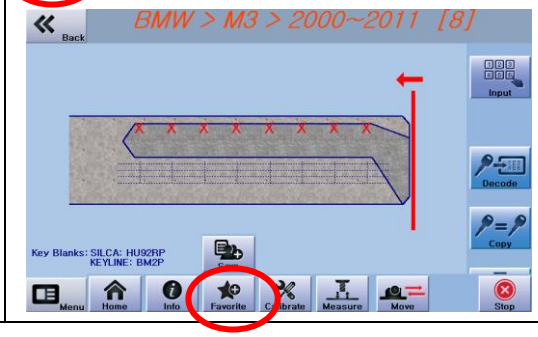


[Favorite]

Press the button to register the current key data to Favorite.

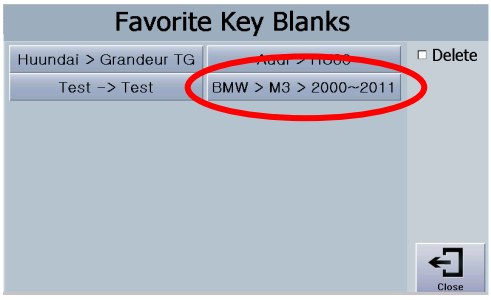
e.g.) Manufacturer: BMW
Model: M3

1. Register

1.		Open the registering key data and press on the lower left.
2.		Press in the menu at the bottom of the screen.

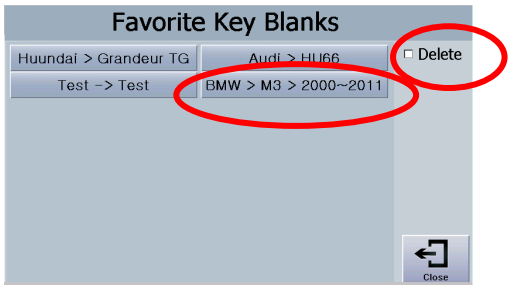
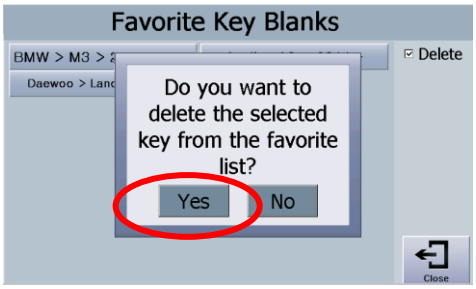
3.		Press Yes in the box.
4.		Press OK in the box.

2. Open

1.		Press Favorite in the initial screen.
2.		Press favorite to check the registered key data.

3. Delete

1.		Press Favorite in the initial screen.

2.		Press and Press the data button you want to delete.
3.		Press in the box.

[Tool Measure]

When you replace the Cutter during operation, you can measure the Cutter length without going to the setting menu.

[Save]

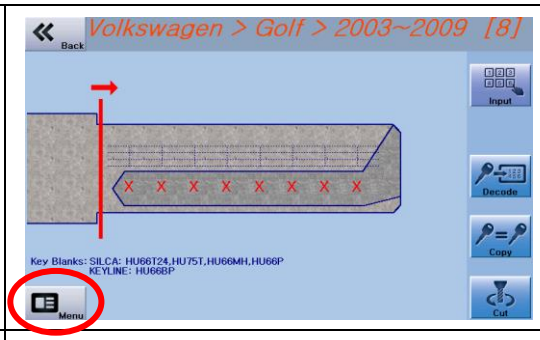
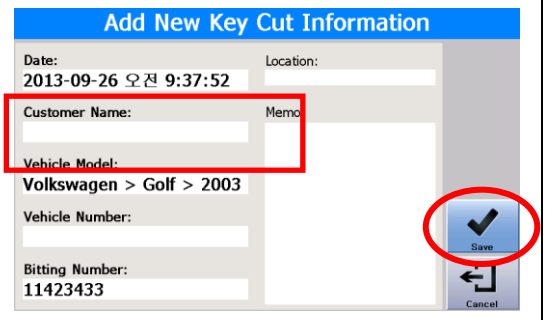
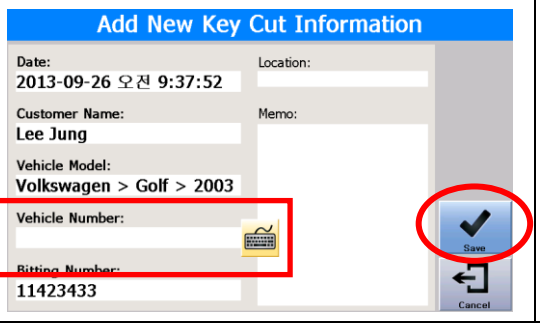
Press the button to register the customer information.

CodeMaster can save data of vehicles previously handled, and if same vehicle is handled, the saved data will be retrieved and it makes the work easier.

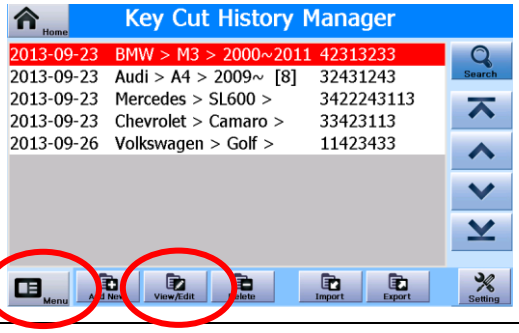
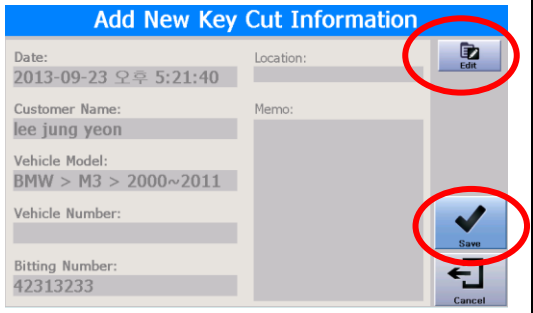
e.g.) Manufacturer: Volkswagen
Model: Golf

1. Registration

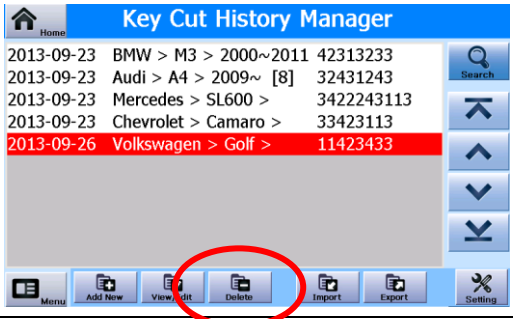
Press the buttons in the order of pictures below to save customer and vehicle data.

1.		Enter pin number, and press .
2.		Press , and go to the next screen.
3.		Press the empty field of customer name and press to enter the name.
4.		Press the empty field of vehicle number, and press and press .

2. View and Edit

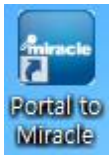
1.		Press to retrieve the list.
2.		Select data to be checked, press and press to retrieve data.
3.		Press on the upper right corner to edit data and press to save it.

3. Delete

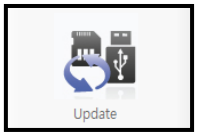
1.		Select data to be deleted and press .
2.		If you press , then data will be deleted.

Data and Firmware Upgrade

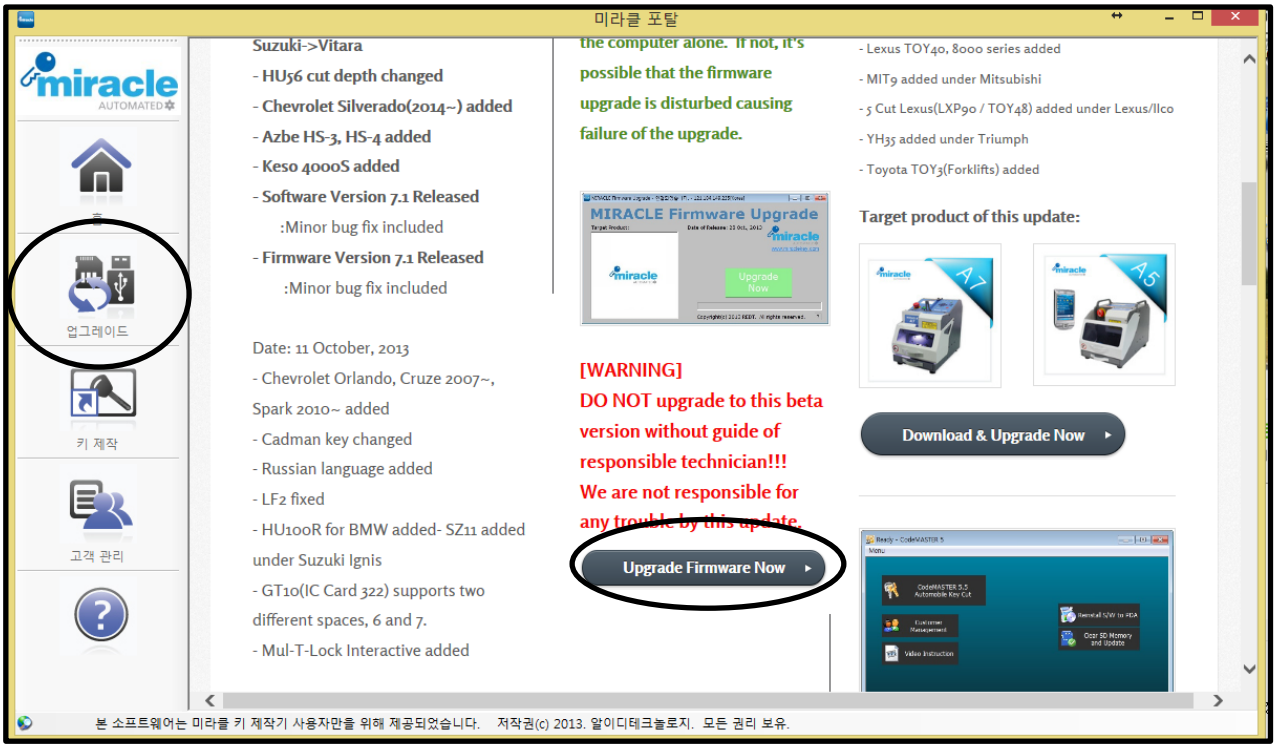
Miracle-A6 provides the function to connect the device and PC through a USB cable and automatically upgrade data and firmware. New key data and product functions can be easily added through this.

1. Double click 

on the home screen to execute the program.

2. Once the program is executed, press 

from the left menu to make the data upgrade screen appear as seen in the figure below.


미라클 포탈
업그레이드
키 제작
고객 관리
Suzuki->Vitara
- HU56 cut depth changed
- Chevrolet Silverado(2014~) added
- Azbe HS-3, HS-4 added
- Keso 4000S added
- Software Version 7.1 Released
:Minor bug fix included
- Firmware Version 7.1 Released
:Minor bug fix included
Date: 11 October, 2013
- Chevrolet Orlando, Cruze 2007~, Spark 2010~ added
- Cadman key changed
- Russian language added
- LF2 fixed
- HU100R for BMW added- SZ11 added under Suzuki Ignis
- GT10(IC Card 322) supports two different spaces, 6 and 7.
- Mul-T-Lock Interactive added
the computer alone. If not, it's possible that the firmware upgrade is disturbed causing failure of the upgrade.
[WARNING]
DO NOT upgrade to this beta version without guide of responsible technician!!!
We are not responsible for any trouble by this update.
Upgrade Firmware Now
- Lexus TOY40, 8000 series added
- MIT9 added under Mitsubishi
- 5 Cut Lexus(LXP90 / TOY48) added under Lexus/Ilco
- YH35 added under Triumph
- Toyota TOY3(Forklifts) added
Target product of this update:
Download & Upgrade Now
본 소프트웨어는 미라클 키 제작기 사용자만을 위해 제공되었습니다. 저작권(c) 2013. 알이디테크놀로지. 모든 권리 보유.

3. Press

button on the center of the screen.

4. Press

from the screen above and execute data and firmware upgrade.

- **Do not turn off the computer while the Firmware is being upgraded.**
- **If any problem occurs during Firmware Upgrade, the product may have operating problems. In this case, ship the product to the service center.**

☞ **TIP)**

- **In order to upgrade the data and firmware of the Miracle-A6, the PC and the device should be connected by USB cable.**
- **Firmware means a program embedded in the CPU of a mainboard in the device. It controls the operation of the device.**

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Warranty

Product: Desktop CNC Cutter

Model: Miracle-A6

The manufacturer's warranty lasts for 12 months from the purchase date and the below is the warranty details.

Warranty Details

1. Warranted Product: Miracle-A6
2. Warranty Period: 12 months from the purchase date. However, if it is unable to confirm the purchase date, 13 months from the manufactured date is the warranty period.
3. Paid Service during Warranty Period
   - ① Product breakdown caused by natural disaster (fire, salt damage, gas, earthquake, storm and flood damage)
   - ② Replacement of consumables that naturally wear out
   - ③ Product breakdown caused by power failure and poor connecting device
   - ④ Product breakdown caused by exterior factors, not by the product itself
   - ⑤ Product breakdown caused by repairing or remodeling by other personnel, not by RED Technology engineer
   - ⑥ Product breakdown caused by intentional or accidental mistakes of customers
4. Free Service
   - ① In case of product breakdown caused by other factors than the factors described in the paid service section during the above mentioned warranty period
5. Shipping in case of Product Breakdown
   - ① In principle, the product should be shipped to RED Technology for repair
   - ② During the free A/S period, the product shipping cost shall be paid by RED Technology.
   - ③ After the free A/S period, the product shipping cost shall be paid by the customer.
   - ④ The shipping cost of product without defect shall be imposed to the customer.
6. RED Technology is exempted from all obligations and accountabilities for the product sold to other countries without a clear export contract with the company.
7. For the matters unstated in this Warranty, 『Consumer Injury Compensation Rule』 shall be observed.

RED Technology 알이디테크놀로지인

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Customer Service Phone: 1599-5042 Fax: 042-673-0905
Homepage: www.iredt.com

Customer Information	Model: Purchase Date: Name: Business: Address: Phone:	Dealer Information	Name: Business: Address: Phone: